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نموذج رقم (١٦)
اقرار والتزام بالمعايير الأخلاقية والأمانة العلمية وقوانين الجامعة الأردنية وأنظمتها وتعليماتها لطلبة الدكتوراة

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عنوان الاطروحة: Moral Distress Among Jordanian Critical Care Nurse and their Perception of Hospital Ethical Climate

اعلن بأنني قد التزمت بقوانين الجامعة الأردنية وأنظمتها وتعليماتها وقراراتها السارية المفعول المتعلقة باعداد اطروحات الدكتوراه عندما قمت شخصيا" باعداد اطروحتي وذلك بما ينسجم مع الأمانة العلمية وكافة المعايير الأخلاقية المتعارف عليها في كتابة الأطروحات العلمية. كما أنني أعلن بأن اطروحتي هذه غير منقولة أو مستلة من أطاريح أو كتب أو أبحاث أو أي منشورات علمية تم نشرها أو تخزينها في أي وسيلة اعلامية، وتأسيسا" على ما تقدم فانني أتحمل المسؤولية بأنواعها كافة فيما لو تبين غير ذلك بما فيه حق مجلس العمداء في الجامعة الأردنية بالغاء قرار منحي الدرجة العلمية التي حصلت عليها وسحب شهادة التخرج مني بعد صدورها دون أن يكون لي أي حق في التظلم أو الاعتراض أو الطعن بأي صورة كانت في القرار الصادر عن مجلس العمداء بهذا الصدد.

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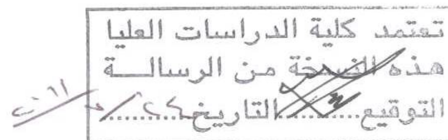
MORAL DISTRESS AMONG JORDANIAN CRITICAL CARE NURSES AND THEIR PERCEPTION OF HOSPITAL ETHICAL CLIMATE

By
Rabia Salim Allari

Supervisor
Dr. Fathieh Abu-Moghli

This Dissertation was submitted in Partial Fulfillment of the Requirements for the Doctor of Philosophy Degree in Nursing Science.

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July, 2011

COMMITTEE DECISION

This Thesis/Dissertation (Moral Distress Among Jordanian Critical Care Nurses and their Perception of Hospital Ethical Climate) was Successfully Defended and Approved on 20/7/2011

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DEDICATIONS

In the name of Allah, Most Gracious, Most Merciful

Praise be to Allah, the Cherisher and Sustainer of the worlds, Most Gracious, Most Merciful; Master of the Day of Judgment, You alone do we worship, and your aid we seek, Show us the straightway, The way of those on whom you have bestowed your Grace, those whose (portion) is not wrath, and who go not astray.

Amen

This dissertation is dedicated ***to my husband***, Mustafa, who remains my constant solace in my life; you have given me so much. With your love, patience, support, and personal dreams, I have become a better person; I could not have done any of this without you.

To my son, Abdullah, for your sacrifices and love, my child you was my best support and you enlighten my heart with love and happiness.

To my remarkable mother, father, sisters, and brother, for their love and support. My mother & father who instilled and modeled the values of hard work, dedication and the importance of lifelong learning, I know they are proud that my education has taken me this far.

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MORAL DISTRESS AMONG JORDANIAN CRITICAL CARE NURSES AND THEIR PERCEPTION OF HOSPITAL ETHICAL CLIMATE

By
Rabia Salim Allari

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ABSTRACT

Aim: The main purpose of this study was to describe nurses' level of moral distress, their perception of the hospital ethical climate, and the relationship between their level of moral distress, and their perception of ethical climate and selected demographic variables.

Background: Moral distress is a phenomenon of increasing concern in nursing practice, education and research. Previous research has suggested that moral distress is associated with perceptions of ethical climate, which has implications for nursing practice and patient outcomes.

Methods: A descriptive, correlational design was used in this study. Moral Distress Scale, Hospital Ethical Climate Scale and a demographic data form were administered to a random sample of 150 critical care staff nurses at 12 hospitals in Jordan. Data were analyzed using descriptive and inferential statistical procedures.

Result: The registered nurses reported moderate level of moral distress. No significant correlation was indicated between moral distress intensity and frequency and nurses' perception of hospital ethical climate. No significant correlation was indicated between any of the hospital ethical climate scale factors (peers, patients, managers, and hospital administrators) and total moral distress except the significant correlation between moral distress frequency and physicians.

Conclusion: There is a pressing need for conceptual work to generate a more robust understanding of moral distress in nursing practice and the relationship between moral distress, ethical climate, decisions to leave positions or nursing, and the impact on patient care. Such work could contribute to the development and refinement of instruments to measure moral distress and ethical climate.

Implications: This study was the first one that examines the level of moral distress and the perception of ethical climate among critical care nurses in Jordan. The findings of this study may assist hospitals and nurse managers in identifying factors contributing to moral distress from the nurses' perspective, and assist in planning and implementing strategies to reduce moral distress among nurses in critical care units and consequently contribute to improving the quality of nursing care.

CHAPTER ONE

Introduction

1.1. Background

Nurses, especially those working in critical care units, are often faced with ethical dilemmas associated with the management of patients' care (Corley, 2002). The critical care nurses often encounter a great deal of pain and suffering as they journey with patients through weeks and months of life support and burdensome treatments and care that nurses perceive as being non-beneficial to the patients (Erlen, 2004). Technology advancement and changes in healthcare delivery combine to create more difficult treatment decisions and add new responsibilities to nurses as caregivers and patients' advocates (Meltzer & Huckabay, 2004; Elpern, Covert, & Kleinpell, 2005). The complexity and frequency of ethical dilemmas encountered by the nurses working in critical care units greatly exceed those encountered by nurses working in other acute care settings (Berger, Seversen, & Chvatal, 1991). Working in such emotionally charged environments where life-and-death issues are encountered on a daily basis could become highly stressful and could contribute to the experience of moral distress (Corley, 1995).

Moral distress is a phenomenon of increasing concern in nursing practice, education and research (Corley, Minick, Elswick, & Jacobs, 2005). Although accounts of moral distress in the literature are compelling, research on moral distress is limited, both in number and quality (Nathaniel, 2003). Moral distress was first defined by Jameton (1984) as "painful feelings and/or the psychological disequilibrium that occurs when nurses are conscious of the morally appropriate action a situation requires, but cannot carry out that action because of institutional obstacles; lack of time, lack of supervisory support, exercise of medical power, institutional policy, or legal limits" (p. 6). This definition was later expanded by Jameton to reflect the

causes, nurses' responses and consequences of moral distress. Jameton (1993) distinguished between initial distress, involving frustration, anger, and anxiety when confronted with institutional obstacles and value conflicts and reactive distress, involving negative feelings engendered when nurses do not act on their initial distress. Reactive distress may involve internal obstacles such as weak moral agency, an inability to identify the ethical issues involved, or a lack of knowledge of alternatives. More recently, Pendry (2007) defined moral distress as "the physical or emotional suffering that is experienced when constraints (internal or external) prevent one from following the course of action that one believes is right" (p. 217). Though all types of moral problems facing nurses are difficult, situations involving moral distress may be the most difficult ones facing nurses. Moral distress is a significant cause of emotional suffering among nurses that may result in unfavorable outcomes for both nurses and patients. The experience of moral distress leads to frustration, depression, stress, and absenteeism that jeopardize nursing care. In addition, leaving a particular position in a certain area of practice or even leaving the profession is perceived to be the result of the distress (Elpern, et al., 2005).

Moral distress is organizationally induced, and is associated with perceptions of ethical climate (Olson, 1998). Ethical climate has been described by Olson as "the perceived environment within an organization that promotes ethical reflection, and allows for inquiry, debate, and expression of differing viewpoints, while promoting each individual’s values and mutual trust" (p. 345). The way nurses perceive their work environment can affect their morals, attitudes about ethical issues and their ethical decision making (Kelly, 1998). Perception of the ethical climate of one’s workplace is based on the relationships with peers, patients, managers, physicians, and hospital administration when encountering ethical problems (Kelly, 1998). These relationships, according to Olson (1995), are influenced by

many conditions such as varying levels of power, trust, inclusion, role flexibility, and inquiry that is necessary for ethical problem-solving.

Research to date suggests that the ethical climate contributes to moral distress, nurses' decreasing job satisfaction, attrition and unsafe patient care (Hart, 2005; Elpern, et al., 2005). Corley's moral distress theory stressed the need for an in-depth examination of the environment of care and a better understanding of the environmental correlations and relationships. Assessing the nurses' perception of the ethical climate is one component of the environment of care that may be useful (Corley, 2002). Within her explication of a theory of moral distress, Corley stated several research-based propositions related to the relationship between various moral concepts. The hospital ethical climate and the demographic variables of gender, education, ethics education, and work experience were listed as potentially having significant correlation and prediction upon the experience of moral distress (Corley, 2002; Fogel, 2007; Pauly, Varcoe, Storch, & Newton, 2009).

Moreover, the American Association of Critical-Care Nurses (2004) position statement on moral distress asserts that addressing and mitigating the consequences of moral distress for the purpose of creating a healthier work environment is the responsibility of each nurse and employing agency.

Worldwide ethical climate in health-care have not received adequate attention of researchers studying the phenomenon of moral distress (Pauly, et al., 2009). Many publications have omitted any serious discussion of the larger social context which often influences the ethical climate and individuals' ethical behavior (Davis, 2008). Much of the focus was on the nurse and virtues, ethical principles, and the nurses-patient relationship. Research on quality practice environments and nurses' workplace has not included an explicit focus on the ethical climate as a significant aspect of the organizational climate (Aiken,

Clarke, Sloane, Sochalski, Busse, & Clarke, 2001; Aiken, Clarke, Sloane, Sochalski, & Silber, 2002). Furthermore, little is currently known about the correlation of moral distress, hospital ethical climate, and demographic variables; therefore, examination of this issue is obviously indicated.

In Jordan, despite the high turnover rate (44%) among Jordanian nurses (JNC, 2008), investigation of nurses' experiences of moral distress and nurses' perception of ethical climate has been lacking or limited. Many Jordanian studies highlighted problems of nurses' Job dissatisfaction and withdrawal (Suliman & Abu Gharbieh, 1996), nursing shortage (Mrayyan, 2005), job satisfaction (Mrayyan, 2006), and turnover (Mrayyan, 2007). None of the previous mentioned studies aimed to investigate the level of moral distress and perception of ethical climate among nurses or to explore the predictors of moral distress. This lack of attention is of particular concern because of the impact of moral distress on retention and the widening disparity between the hospital needs for critical care nurses and the availability of these nurses.

1.2. Significance of the study

Moral distress has recently been approved as a new nursing diagnosis and has been included in the 2007- 2008 edition of Nursing Diagnoses: Definitions and Classification (Kozier & Erb's, 2007, p. 1530-1531). Feelings labeled as stress, burnout, emotional exhaustion, and job dissatisfaction may actually be indicative of moral distress. These symptoms may be the reason given by nurses for leaving a specific work environment or even for departure from the nursing profession (Elpern et al., 2005).

In recognition of its harmful effects, the investigation of moral distress in the work environment is imperative and leads to essential improvements in patient care and work outcomes (Fogel, 2007). Understanding the contributing factors to moral distress by nurses

will provide them a means to recognize and intervene with morally distressing situations. Moreover, considering the growing global concern over the shortage of nurses and the difficulty of recruiting nurses in all areas of care necessitates the discussion of moral distress as a mean to reduce burnout and turn over.

According to Khalaf, the dean of faculty of Nursing at the University of Jordan, (Personal communication, February, 2010), and Jordanian data base for nursing research(2011) no studies have been conducted in Jordan to examine the level of moral distress and the perception of ethical climate among practicing nurses. Therefore, this study is considered the first study directed at investigating this important phenomenon of moral distress and hospital ethical climate. The findings of this study may assist hospitals and nurse managers in identifying factors contributing to moral distress from the nurses' perspective. It findings may also assist in planning and implementing strategies to reduce moral distress among nurses in critical care units in particular. Furthermore, it could help the critical care nurses to recognize their moral distress as the first step to act upon it. The findings will have an important impact on education because the understanding and the ability to diagnose moral distress and its sources should begin in initial professional education, whereby nursing students are being socialized into the values of the profession, and encounter the conflicts inherent in transferring those values into complex clinical settings.

1.3. Purpose

The purposes of this study are to describe nurses' level of moral distress, their perception of the hospital ethical climate, and to examine the relationship between the level of moral distress and nurses' perception of ethical climate and selected demographic variables (age, gender, education, years of professional experience, and employment years in the same hospital).

The specific aims are to:

1) Assess Jordanian critical care nurses' level of moral distress (intensity and frequency) and their perception of hospital ethical climate;

2) Examine the relationship between the level of moral distress and the perception of hospital ethical climate;

3) Assess the relationship between selected demographics and the level of moral distress;

4) Examine the ability of selected demographics (age, gender, education, years of professional experience, and employment years in the same hospital) and variables related to perception of hospital ethical climate (peers, patients, managers, hospitals administration, and physicians) in predicting the level of moral distress among critical care nurses.

1.4. Study Questions

1. What is the level of moral distress experienced by Jordanian critical care nurses?
2. How do Jordanian critical care nurses perceive their hospital ethical climate?
3. What is the relationship between the level of moral distress and the perception of hospital ethical climate?
4. What is the relationship between selected demographics (age, gender, education, years of professional experience, and employment years in the same hospital) and the level of moral distress?
5. What are the predictors of moral distress among the selected variables (demographic variables including (age, gender, education, years of professional experience, and employment years in the same hospital) and variables related to the perception of hospital ethical climate (peers, patients, managers, hospitals administration, and physicians)?

1.5. Conceptual framework

An investigation of the relationships among the concepts of moral distress, and both ethical climate, and demographic characteristics is proposed for this study. The conceptual framework for this research is derived from the three conceptual frameworks developed by Jameton (1984), Olson (1998), and Corley (2002). The proposed framework of this study integrates the concepts of moral distress (Jameton, 1984; Corley, 2002), ethical climate (Olson, 1998; Corley, 2002), and individual characteristics (Corley, 2002) (Figure 1).

The conceptual frame work in this study suggests that the level of moral distress as indicated by its frequency and intensity is influenced by one's perception of ethical climate and individual characteristics. According to Jameton (1984), Olson (1998), and Corley (2002) the perception of the ethical climate of one’s workplace is based upon the relationships one has with peers, patients, managers, hospital administration, and physicians when encountering ethical problems. The conditions of perceived ethical climate may also assist with moral distress by overcoming barriers after the initial experience so that the moral action may be completed eventually. A source of support for the nurses may be found within an organization in which they perceive an ethical climate that allows for inquiry and discussion with all stakeholders. A consistently supportive ethical climate may minimize the frequency and intensity of moral distress.

Corley (2002) suggested that exploration of the ethical climate is one component of the environment of care that may be useful. Also the demographic variables of gender, education, ethics education, and work experience may have an impact the moral distress. Demographic variables of gender, education, work experience, and employment years in the same hospital were listed in the proposed framework as potentially having significant impact upon the experience of moral distress. So identifying constraints in the hospital ethical climate

from registered nurses' perspective and the effect of demographics on the moral distress is an important first step in recognizing and positively modifying the level of nurses' moral distress.

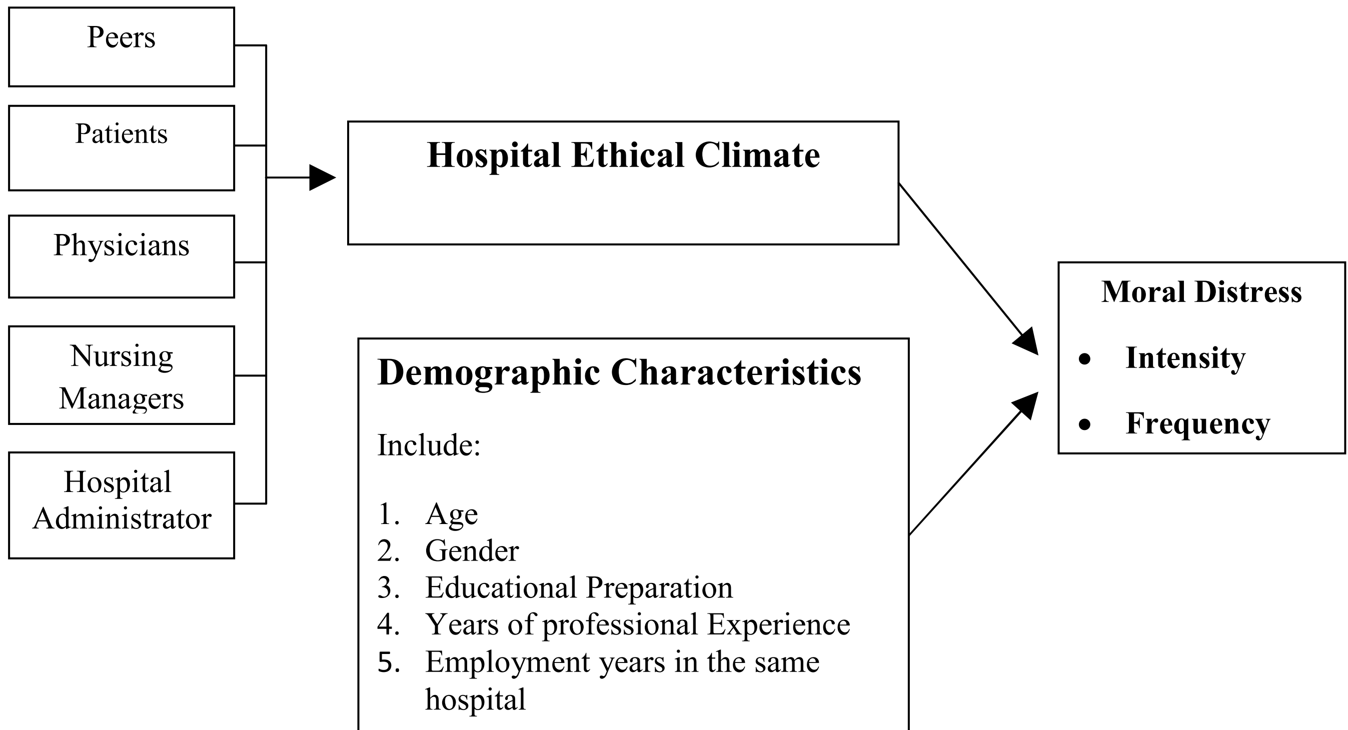


Figure 1: Conceptual Framework

1.6. Operational definitions

Moral distress: nurses' perception of the level of moral distress as reflected by the score obtained on the Moral Distress Scale (MDS).

Ethical climate: the shared perception of organizational practices related to ethical decision-making as indicated by the scores obtained on the Hospital Ethical Climate Scale (HECS).

Nurses: registered nurses caring for patients in critical care units.

Demographic characteristics: Individual variables selected by the researcher based on previous studies specifically; gender, age in years, education, years of experience as a registered nurse, and employment years in the same hospital.

1.7. Summary

This study focused on moral and hospital ethical climate experienced by critical care nurses. The purpose of this study was to describe nurses' level of moral distress, their perception of the hospital ethical climate, and the relationship between the level of moral distress and nurses' perception of ethical climate and selected demographic variables. The investigation of moral distress in the work environment is essential and leads to improvements in patient care and work outcomes, and this will help to overcome the problem of nursing shortage and the difficulty of recruiting nurses in all areas of care. The conceptual framework for this research is derived from the concepts developed by the three authors Jameton (1984), Olson (1998), and Corley (2002). It suggests that the level of moral distress as indicated by its frequency and intensity is influenced by one's perception of ethical climate and one's individual characteristics. The following chapter reviews the available literature.

CHAPTER TWO

Literature Review

This review of the literature intends to provide the state of the science concerning issues related to moral distress and perception of hospital ethical climate among critical care nurses. This chapter is organized into three sections: moral distress, hospital ethical climate, and a summary of the reviewed articles.

Specific parameters were established for the literature review due to the amount of research that exists on moral distress worldwide. An extensive literature search was carried out using MEDLINE, the Cumulative Index to Nursing and Allied Health Literature (CINAHL), the PsycINFO, EBSCOhost, Science Direct and National Institutes of Health (NIH) databases. Main keywords included moral distress, hospital ethical climate, causes of moral distress, contributing factors of moral distress, concept of moral distress, antecedent, consequences, and assessing moral distress.

2.1. Moral distress

Many investigators have studied the stress related phenomenon and recognized its effects on nurses and the nursing care they provide (Jameton, 1984; Wilkinson, 1989; Corley, 1995). Moral distress is a pervasive problem in nursing (Erlen, 2001). There is evidence that nurses' moral distress affects quality of patient care and subsequent health outcomes. Nurses who frequently experience moral distress are at risk for decreased coping with stressful situations, leading to decreased self-esteem, wholeness and ultimately, loss of the ability to give good patient care (Erlen, 2001). Studies suggest that moral distress contributes to problems with nurses’ capacity to care and thus affects the quality of nursing care (Fenton, 1988; Viney, 1996; Davies, et al., 1996; Krishnasamy, 1999). Evidence also suggests that

ethical distress contributes to the loss of nurses' ethical integrity, job dissatisfaction, and loss of nurses from the workforce (Wilkinson, 1987-88; Kelly, 1998; Millette, 1994; Corley, 1995; Hefferman & Heilig, 1999).

The earliest situation reference to moral distress can be found in Florence Nightingales Notes on Nursing (Nightingale 1859/1980). Nightingale described her insight into the elements that constitute nursing and described her frustration when faced with obstacles placed before her, thus hindering the care she wished to provide. Nightingale's Notes on Nursing exemplify the foundation of all current definitions of moral distress.

In 1993, Jameton, one of the first author to address ethical distress, conducted a qualitative study on ten nurses for the purpose of describing the experience of moral distress, moral responsibilities, and nursing practice. He distinguished between initial and reactive moral distress and the symptoms reflected by the nurses experiencing each type. The feelings of frustration, anger and anxiety when faced with institutional obstacles and interpersonal conflict about values were used to indicate initial distress. The negative feelings, depression, nightmares, headaches, and feelings of worthlessness engendered when nurses do not act on their initial distress were used to indicate reactive distress. According to Jameton, initial distress is caused by bureaucratic obstacles and/or disagreeable colleagues. Reactive distress may be caused of internal obstacles such as weak moral agency, an inability to identify the ethical issues involved, and a lack of knowledge of alternatives (Jameton, 1993).

Wilkinson's (1987/88), building on Jameton's work (1984), studied the phenomenon among hospital staff nurses using a qualitative research design that combined grounded theory and phenomenology. The stated purpose of Wilkinson's study was to "generate substantive theory about the relationship between moral aspects of nursing practice and quality of patient care" (p. 17). Wilkinson conducted 24 one-hour interviews with 13 staff nurses and 11

practical nurses with ages ranging from 26 to 58 years and having 3-30 years nursing experience.

Analysis of the data revealed the following categories: kinds of cases (Cases mentioned most often were those involving prolonging the life of dying patients; performing unnecessary tests and treatments especially on terminal patients; lying to patients; and incompetent or inadequate treatment by a physician), frequency of occurrence (Frequency seems to depend upon the type of unit, nurses' definition of what constitutes a moral issue, and individual nurses' moral values), contextual constraints (External constraints mentioned most frequently were physicians, the law and/or lawsuits, nursing administration, hospital administration, and policies. Internal constraints included nurses being socialized to follow orders, futility of past actions, fear of losing their jobs, self-doubt, and lack of courage), feelings (anger, frustration, and guilt), effect of moral distress on nurses wholeness (five basic effects: a) loss of self worth; b) altered personal relationships; c) psychological effects such as anger and depression; d) behavioral manifestations such as nightmares, crying, and fighting; and e) physical symptoms such as palpitations, diarrhea and headaches), effect of moral distress on patient care (Participants were evenly divided in their assessment of the quality of patient care when they were experiencing moral distress), and coping behaviors (mainly avoidance of patients or of particular situations).

Wilkinson developed a model demonstrating the interactions of these categories and the dimensions of moral distress. She also suggested a Moral Distress Equation that described the experience of moral distress and the effects of coping behaviors and frequency of such cases on personal wholeness and patient care.

The Wilkinson's equations are:

Experience

Moral situation	+ Moral decision about right decision	+ Perceived inability to act	= Painful feelings and psychological disequilibrium

Effect

Coping behaviors + Frequency of cases = Effect on wholeness = Effect on patient care

According to Fogel (2007) nearly every subsequent work relied on either Jameton's (1994) or Wilkinson's (1988) definitions. Fenton in (1988) conducted a phenomenological study to describe the experience and effect of moral distress in clinical practice and to present the implications of this phenomenon for nurse administrators. Fenton recorded and analyzed interviews with five instructors and five student volunteers from an intensive care nursing program in a 1250 bed teaching hospital in mid-western Canada. Fenton identified both ineffective and effective responses to moral distress. Effective responses are those that appear to benefit either the patient or the situation; ineffective responses do not appear to benefit either.

Fenton (1988) found that nurses' inability to respond effectively may compromise the quality of patient care and that such experience may remain personally unresolved for many years. Ineffective affective responses such as anger, sarcasm, and crying emerged in clinical situations. Sometimes crying occurred in the midst of the situation, immediately following or later when the nurse was at home. Crying constituted an ineffective response when the nurse had to withdraw from the situation or was unable to interact with other health team members or to provide care for the patient at that time. Nurses sometimes go along with a situation that they believe is morally wrong and then later suffer from guilt and remorse for not having acted in accord with their beliefs. Participants also described the need to withdraw from the situation when coping with distress becomes difficult. Fenton (1988) found that

withdrawal might be very dramatic. The nurse may physically withdraw from the bedside and, even when care is required, there may be hesitancy or difficulty in meeting the patient's basic physical needs.

Sundin-Huard and Fahy (1999) expanded Wilkinson's Model to further develop the concept of moral distress. Sundin-Huard and Fahy conducted unstructured, in-depth interviews on a purposive sample of 10 critical care nurses in Queensland, Australia. The purpose of Sundin-Huard and Fahy study was to assess the nurses' experiences of moral distress when attempting to advocate for vulnerable patients. The results revealed a sense of powerlessness among nurses who faced conflicting moral obligations in the face of what they perceived to be inappropriate or futile medical treatment. The nurses perceived a lack of support from nursing supervisors and felt anger, sadness, disgust, powerlessness, hopelessness, and frustration. Having analyzed narratives of the entire sample, Sundin-Huard and Fahy theorized that there are a number of elements integral to moral distress and burnout, though they did not define either. These elements include triggering elements such as life-threatening illness and perceived inappropriate medical treatment; cultural elements such as a disparity in goals of medicine and nursing; conflicting legal and moral obligations; nurses' desire to avoid criticism and shame; immediate environmental factors such as inadequate staffing, lack of privacy, and time pressure; the medical response; the nursing response; and the aftermath of burnout.

In an attempt to explore the effect of moral distress, in 2000, Webster and Baylis published a case study of nurses and other healthcare professionals which examined the residual effects of moral distress. Webster and Baylis reported that internal constraints should include nurses' changed perception of what was the "right" course of action to take. For example, originally nurses may perceive themselves as taking the "right" course of action in the situation, but upon reflection, changed their belief and perceived themselves as not having

pursued the right course of action. Webster and Baylis described this change in belief as an internal barrier which also gives rise to moral distress. They recommended that the definition of internal constraints giving rise to moral distress be expanded beyond Jameton's and Wilkinson's definitions.

Fry, Harvey, Hurley, and Foley (2002) presented a model that delineates the separation of moral distress into two reactions, initial distress and reactive distress as discussed by Jameton (1993). They sought, in their qualitative study, to identify the dimensions of moral distress in military nurses and to further develop interventions within contextual factors to “ameliorate the effects and consequences of moral distress” (p. 385). In this study, the unique setting of a crisis the military nurses were faced, the potential for physical danger, and the higher incidence of caring for young persons experiencing major trauma was seen as contributing to an increased vulnerability to moral distress in the nurses in this study. Fry et al. developed a model integrating several contextual factors contributing to moral distress. These factors are:

1. Contextual factors such as an inadequate management control or bureaucracy that may interfere with the nurse’s responsibilities to the patient and may create a perception of the administration and coworkers as nonsupportive.
2. Patient care factors such as unnecessary treatments that prolong life with suffering or treatment decisions that are dehumanizing.
3. Nurse related factors such as increased sensitivity to the moral dimensions of patient care situations and the nurse’s subordinate role in patient care. (p. 376).

The first attempt to measure moral distress was done by Corley (1995) who developed the Moral Distress Scale (MDS). The MDS is a 32-item eliciting quantitative data on nurses’ experience with moral distress in particular situations. Items in the MDS include prolonging life, performing unnecessary tests and treatments, lying to patients, and

incompetent/inadequate treatment by a physician. Corley articulated two purposes for the development and use of the MDS.

First, the MDS was created to “measure the moral distress of critical care nurses, ascertain the level of moral distress that critical care nurses experience, and specify the issues associated with moral distress that occur most frequently” (Corley, 1995, p. 281).

The second purpose of developing MDS was to "examine the relationship among ethical work environment, nurse moral distress and patient satisfaction with participation in treatment decisions, and to assess the impact of moral distress on nurse resignations" (Corley, Jacobs, Minick, & Elswick, 2000, p. 1).

To ascertain the ability of the MDS to achieve the first purpose, Corley (1995) administered the MDS to 111 registered nurses recruited from the local division of the American Association of Critical Care Nurses, a private hospital in New York, and critical care units in a medical center. Corley found that the mean moral distress level was relatively low between 2 and 3 on the 7-point scale. Some nurses experienced high levels of moral distress in particular situations. The situations associated with the greatest and most frequent moral distress for the largest percentage of critical care nurses were those associated with providing aggressive care and prolonging life; following a family’s wishes to continue life support when the nurse perceived that this was not in the best interest of the patient; continuing to participate in care for hopelessly injured patients because no one would make the decision to withdraw treatment; carrying out physicians’ orders for what nurses perceived were unnecessary tests and treatments; and ignoring situations in which the nurse suspected inadequate informed consent. Corley found that 13% of the nurses had left nursing positions, and 5% actually left the profession because of moral distress.

To ascertain the ability of the MDS to achieve the second purpose, Corley, Jacobs, Minick, and Elswick (2000) conducted a study using the MDS. The results indicated that 25% of the sample studied (N =106) had left a position in the past as a result of moral distress, which was a disturbing indication for the authors that this problem is increasing. In another methodological study Corley, Elswick, Gorman, and Clor (2001) evaluated the elements of a conceptual framework used to develop the MDS; these elements included the work of Jameton (1984), Wilkinson (1987/88), and incorporated "House and Rizzo's (1972) role conflict theory and Rokeach's (1973) value theory. The sample consisted of 214 nurses selected from several hospitals in the United States using the convenience method. The results of the study reflected high moral distress as indicated by high mean scores on the MDS. The authors believed that nurses had a stronger sense of responsibility rather than decision making power when taking care of their patients. The duel between the sense of responsibility of the nurse, the power of the physician and hospital management caused an imbalance between "power" and "responsibility" and finally results in moral distress. The study ascertained the validity and reliability of the MDS.

Further, Corley, et al. (2005) conducted another study on a group of 106 nurses from two large medical centers for the purpose of examining the relationship between moral distress intensity, moral distress frequency and ethical work environment. The results indicated that moral distress had a negative impact on the healthcare work environment and was a major contributor to nurses leaving their work setting and even the profession. The result also indicated that unsafe staffing was the main source of moral distress and that nursing shortage affects the delivery of health care services.

Raines (2000) conducted a descriptive, correlational study utilizing a survey technique on a nationwide sample of 229 oncology nurses. The results indicated that nurses experienced an average of 32 different types of ethical dilemmas over one year on a daily basis. Raines

found that 80% of oncology nurses studied had a moral distress score of 6 on a 10-point scale. Raines found that the highest "moral distress" levels were correlated with decisions made in ethically charged situations where constraints were placed upon the actions of the nurse attempting to follow through with the decision. This study quantitatively identified which of the 'situational factors' are causing the inconsistencies between nurses' 'ideal' ethical decision-making and the subsequent 'real' ethical behavior" (p.39).

Several studies were conducted to explore the ethical situations that may lead to the experience of moral distress. For example, Redman and Fry (2000) conducted a systematic analysis of methodological studies to report what can be learned about nurses' ethical conflicts. Five studies (Redman & Fry, 1996; Redman & Fry, 1997; Butz , Redman , Fry , & Kolodner, 1998; Redman & Fry, 1998a; & Redman & Fry, 1998b) conducted between 1994 - 1997 were identified and analyzed for: (1) the character of ethical conflicts experienced; (2) similarities and differences in how the conflicts were experienced and how they were resolved; and (3) ethical conflict themes underlying four specialty areas of nursing practice (diabetes education, pediatric nurse practitioner, rehabilitation and nephrology). The purpose of each study was to identify the types of ethical conflicts experienced, the manner in which the conflicts were experienced, how the conflicts were resolved, and the associated demographic, educational and practice setting factors. The samples for each study were drawn from registered nurse (RN) who were members of specialty societies and who had been certified in one of four specialties: diabetes education, nephrology, pediatric nurse practitioner, or rehabilitation.

The Moral Conflict Questionnaire (MCQ) developed by Fry and Damrosch (1994) were used to collect data in all five studies. All participants completed the same questionnaire which required them to describe an ethical conflict they had experienced in practice and describe how they resolved the conflicts. The result indicated that many of the studies focused

on a particular role or setting were based on the presumption that the nature of the patients' illnesses, the social commitment to their treatment, the technology used, and the organization and relationship of professionals delivering care, would make a difference in the content of the conflict. The results also reflected significant variation across specialties, with some fields showing more dominance of some ethical conflicts. For example nurses in Intensive care units experience conflicts due to harm/good of life-prolonging aggressive therapies. The second major finding of the study was that conflicts experienced by an average of 33% of the nurses turned to moral distress as they lacked the power to do the right actions because of institutional constraints. Moreover, there was wide variability in the proportion of conflicts that nurses believed were resolved (25–70%) but a generally low percentage reported utilization of ethics committees. The perceived lack of access to ethics committees and organizational disinclination to deal with physicians made these conflicts which were experienced as 'moral distress', irresolvable in the nurses' minds. Nurses lose their capacity for caring, avoid patient contact, and fail to give good physical care as a result of moral distress.

Similarly, Gutierrez (2005) conducted a qualitative, descriptive study on a purposive sample of 12 critical care nurses working in a surgical intensive care unit at a large teaching hospital in the Midwestern region of the United States. The study results showed that due to the nature of acutely ill patients, critical care nurses experience complex situations involving multiple moral conflicts. Nurses in the study described situations containing between 1 and 7 moral conflicts with a majority citing 3 conflicts per situation. The highest percentage of situations were overly aggressive treatment followed by physician giving incomplete/inaccurate information to patient and/or family, and the lowest percentage situation was lack of physician follow up.

In a study done by Epern, et al. (2005), to assess the level of moral distress among nurses in a medical intensive care unit to identify situations that result in high levels of moral distress, in addition to other aims. The moral distress scale developed by Corley was administered to a total of 28 nurses working in a medical intensive care unit. The highest levels of moral distress were found to be caused by: Continuing to participate in the care for a hopelessly ill person, followed by following family wishes to continue life support. Nurses also reported that moral distress adversely affected their job satisfaction, retention, psychological and physical well-being, self-image, and spirituality. Experience of moral distress also negatively influenced attitudes toward advance directives and participation in blood donation and organ donation. Furthermore, they indicated that morally distressed nurses reflect anger, frustration, guilt, loss of self-worth, depression, nightmares, suffering, anger, resentment, frustration, sorrow, anxiety, helplessness, and powerlessness.

McClendon and Buckner (2007) studied critical care nurses' levels of moral distress, and the effects of that distress on their personal and professional lives. Both qualitative and quantitative measures were used to collect data from nurses' working in intensive care units and coronary care units. Qualitative data on nurses' feelings were elicited through one to one interviews using open ended questions and a quantitative measure of the degree of distress caused by certain types of situations. The most frequently encountered morally distressing situations were those concerning critically ill patients whose families wished to continue aggressive treatment when it probably would not benefit the patient. Other causes of moral distress were initiating extensive life-saving actions when the nurse thinks it only prolongs death, and working with levels of nurse staffing that are considered unsafe. The feelings related to moral distress invaded nurses' home lives as reported by the participants because they "couldn't turn off" the negative feelings. Also the nurses described feeling short tempered, grouchy and irritable with family, while others questioned their own beliefs. Some

described uncontrollable crying, nightmares, loss of sleep and even physical symptoms of heart palpitations, neck pain, muscle pains, stomach problems, diarrhea and headache (McClendon & Buckner, 2007).

According to Zuzelo (2007) Working with low staffing levels was morally distressing. Inadequate staffing to meet the needs of patient acuity made it difficult to meet the reasonable demands of patient care. Zuzelo studied 97 registered nurses practicing in acute care units using the Moral Distress Scale Data were collected using the Moral Distress Scale and an open-ended questionnaire to rate moral distress associated with clinical practice events and the frequency of the events occurring during practice. Items are scored from 0 to 6 with ‘0’ denoting no moral distress or never occurring in practice and ‘6’ indicating extreme distress or often occurring in practice. The results indicate that nurses thought that “unsafe” work levels happened infrequently (mean frequency=2.84), but when the event did occur it was very distressing (mean score = 4.14). The other morally distressing events included: following families’ wishes for patient care even though the nurse disagreed with the plan, and continuing life support for patients owing to family wishes despite patients’ poor prognoses. One high frequency distressing event was carrying out orders for unnecessary tests and treatments. Qualitative data analysis revealed that the nurses sought support and information from nurse managers, chaplaincy services and colleagues.

Also, in an attempt to explore the contributing factors of moral distress Rice, Rady, Hamprick, Verheijde, and Pendergast (2008) conducted a prospective cross-sectional survey using the Moral Distress Scale tool which was administered to 260 medical and surgical nurses at an adult acute tertiary care hospital. The results showed that the intensity of moral distress was uniformly high to situations related to physician practice, nursing practice, institutional factors, futile care, deception and euthanasia. Encounter frequencies for situations associated with futile care and deceptions were particularly high.

Registered nurses and physicians bring both shared and distinct perspectives to the teams within which they practice. Differences in nurses' and physicians' perspectives are often brought into sharp relief in end-of-life patient situations. So a descriptive pilot study using a survey design was done by Hamric and Blackhall (2007) in an attempt to explore registered nurses' and attending physicians' perspectives on caring for dying patients in intensive care units (ICUs), with particular attention to the relationships among moral distress, ethical climate, physician/nurse collaboration, and satisfaction with quality of care. The study included twenty-nine attending physicians who admitted patients to the ICUs and 196 registered nurses engaged in direct patient care in 14 ICUs in two institutions in Virginia. The results showed that registered nurses reported lower collaboration, higher moral distress, a more negative perception of ethical environment, and less satisfaction with quality of care than did attending physicians. The highest morally distressing situations for both registered nurses and physicians involved those situations in which caregivers felt pressured to continue unwarranted aggressive treatment. Nurses perceived that distressing situations were more frequent than did physicians. Also 45% of the registered nurses surveyed reported having left or considered leaving a position because of moral distress. Overall, registered nurses with higher moral distress scores had lower satisfaction with quality of care, lower perception of ethical environment, and lower perception of collaboration.

Similarly, Winland-Brown & Dobrin (2010) conducted a study which meant to compare nurses and physicians' perspectives on moral distress. Sample of 201 nurses respondents were asked if moral distress ever caused them to leave or consider leaving a position in the past. The results of Winland and Dobrin study were overwhelming as 24% of nurses (combined with nurse practitioners) have had left a position and 26% have considered leaving, whereas, 0% of the physicians had left their position and 0.07% considered leaving. The highest morally distressing situation mentioned by nurses was "Follow the physician's

order not to tell the patient the truth when he/she asks for it", "followed by Assist a physician who in my opinion is providing incompetent care". While according to physician the highest moral distress situation was "Order nurses not to tell the patient the truth when he/she asks for it", "followed by Assist another physician who in my opinion is providing incompetent care".

Ulrich, Hamric and Grady (2010) gave a real life example of a doctor and nurse treating a terminally ill patient with leukaemia who requested CPR and medically futile treatment. Both the doctor and nurse knew the course of action would cause suffering and provide little benefit but felt trapped between the wishes of the patient and their relatives and the orders of a senior doctor who believed it was easier to accede to these wishes. Ulrich et al. argued that doctors and nurses are facing this type of complex ethical dilemma more frequently than ever before. Increasingly, pressure from families and environment in which clinicians work can compete with their obligations to a patient. Situations related to end of life issues can give rise to moral distress which the researchers believed is a growing problem that needs more recognition.

2.2. Hospital ethical climate

Victor and Cullen, known as the "fathers" of ethical climate defined ethical climate as ‘‘the prevailing perceptions of typical organizational practices and procedures that have ethical content (Victor & Cullen, 1988, p.101). Their seminal work on ethical climate has been well received in the business ethics literature prompting over 70 empirical studies in the past 20 years (Mayer, Kuenzi, & Greenbaum, 2007). Victor and Cullen developed their Ethical Climate Survey (ECQ) on a sample of 872 employees from four different business firms. Based on their model of ethical climate, two dimensions of the concept, “types of moral reasoning perspectives” (egoism, benevolence, and principle), and “levels of locus of analysis” (individual, local, and cosmopolitan) intersected to form nine cells of potential types

of ethical climates. The items of the ECQ represented these nine possible intersecting cells. Factor analysis revealed five different ethical work climates: caring, law and code, rules, instrumental, and independence. Furthermore, Victor and Cullen indicated that due to differences in individuals' positions, work groups, and employment histories, perceptions of organizational climate may vary within the firm. Later studies using factor analysis to replicate Victor and Cullen's work found different factors and differing construction of the climates in different settings and populations which expand the descriptive applications of the original work (Shepard, & Markham, 1997; Fritzsche, 2000, Wimbush, Shepard, and Markham, 1997; Barnett & Schubert, 2002).

Building upon the work of Victor and Cullen, Olson's (1995) developed the Hospital Ethical Climate Survey. Olson methodological (1995) study aimed to develop an instrument to measure how hospital nurses perceive the ethical climate of their work setting and to evaluate its psychometric properties. The sample included 360 registered nurses employed in clinical practice at two acute-care hospitals in one United States Midwestern city. The nurses completed a questionnaire consisting of 43 items developed to assess their perceptions of ethical climate. The final model consisted of 26 variables grouped under five categories relevant to the way in which difficult patient care problems with ethical implications are managed. These categories include: the relationships of nurses with peers, patients, managers, hospital administrators, and physicians. Olson concluded that, in general, ethical work climate can be assessed by "measuring employees' perception that reflects how decisions having ethical content are solved" (Olson, 1995, p.85). Employees who feel free to disagree with one another on challenging issues (trust) experience a thorough discussion and critique of the situations as they occur. Role flexibility within the organization allows for all stakeholders in the situation to express views and change opinions in an open dialogue. According to Olson, the way nurses perceive their work environment can affect their attitudes about ethical issues

and their ethical decision-making. A positive ethical climate is needed to support professional nursing practice.

Several researchers which examined the antecedents of ethical climate focused on organizational antecedents. This work includes organizational culture and environment. Olson (1995) and McDaniel (1995) both argue that the ethical climate is an important aspect of the organizational climate and that a positive ethical climate is needed to support professional nursing practice. In 1995, McDaniel studied the relationships between organizational cultures and satisfaction with work ethics among 209 registered nurses working in seven different hospitals. Nurses' satisfaction with work ethics was defined as “the opinion of employees regarding their work pertaining to ethics and its application to practice” (p. 16). Three types of cultures were identified: constructive, passive-defensive, and aggressive-defensive. The constructive culture was seen as one that “encourages employees to interact and approach tasks in positive way using commitment, autonomy, and enhanced decision-making” (p. 15). The other two types were seen as dysfunctional and related to a need for security behaviors that hinder the advancement of an organization or unit. A slight positive relationship between the constructive cultures and ethics work satisfaction was reported. The nurses in McDaniel study reported primary areas of concern regarding the ethical environment including a lack of opportunity to be involved in ethical deliberations, a lack of practice support from administrators, and inconsistent policy and procedures in practice.

Penticuff and Walden (2000) explored the relative contributions of the characteristics of practice environment to nurses' willingness to be involved in activities to resolve clinical ethical dilemmas on a sample of 127 perinatal nurses. The results showed that the organizational variable, nursing influence, accounted for the greatest amount of variance in nurses' reported resolution actions, with nurses' concern about ethics also contributing

significantly. Nurses are more likely to be involved in dilemma resolution activities when they perceive themselves to have higher levels of influence in their practice environments and higher levels of concern about the ethical aspects of clinical situations.

Leino-Kilpi, Suominen, Mäkelä, McDaniel, and Puukka (2002) studied the ethical climate of Finish intensive care unit (ICU) nurses and described the ethical problems that were influenced by organizational factors. The goal of their study was to help nurses and administrators to analyze work in ICUs to improve nurses' work motivation, and consequently to improve the quality of patient care. Data were collected from a 1047 Finnish intensive care nurses, in 35 hospital ICUs by means of the Ethics Environmental Questionnaire (EEQ). The results indicated that nurses have the opportunities to discuss ethics and perceived access to support and advice for addressing ethical concerns. Nevertheless, they expressed worry about organizational ethics, including uncertainty about managerial support for enacting their values. In particular, the participants expressed a concern about personnel policies and the predominant organizational focus on making money rather than on patient care.

Beginning in the late 1990's, a body of research emerged focusing on the effect and consequences of ethical climate (Mayer, Kuenzi, & Greenbaum, 2007). Hart (2005) cross-sectional study of randomly selected 463 registered nurses in Missouri, USA, aimed to investigate the effects of hospital ethical climates on positional and professional turnover intentions of registered nurses. The results indicated that the hospital ethical climate explained 25.4% of the variance in positional turnover intentions among registered nurses and 14.7% of the variance in professional turnover intentions. Together, hospital ethical climate, control over practice, the use of educational reimbursement as a retention strategy, gender, and staff sufficiency explained 29.7% of the variance in positional turnover intentions. Hospital ethical climate, patient load, and control over practice together explained 15.8% of the variance in professional turnover intentions. The findings of this study provide strong evidence that

ethical climate is a significant factor in nurses' decisions to leave their positions or to leave the nursing profession.

The climates in conflict lead to misunderstanding, under-appreciation of work-related roles and responsibilities, and inconsistent decision-making (Aarons & Sawatzky, 2006). Aarons and Sawatzky study examined the association of organizational climate with practice included 301 participants from public sector mental health service providers from 49 programs providing mental health services for youths and families. The result showed constructive versus destructive organizational climates as follows: Constructive climate is characterized by organizational norms of achievement and motivation, individualism and self-actualization, and being humanistic and supportive. Constructive climate encourages interactions with people and approaches to tasks that will enable staff to meet their higher-order satisfaction needs. In contrast, defensive (destructive) climate is characterized by seeking approval and consensus, being conventional and conforming, and being dependent and subservient. Defensive climate encourages or implicitly require interaction with people in ways that will not threaten personal security (p. 62).

Ulrich, O’Donnell, Taylor, Farrar, Danis, and Grady (2007) conducted a study on 1200 nurses to describe how nurses view the ethical climate in which they work, including the degree of ethics stress they feel, and the adequacy of organizational resources to address their ethical concerns. Also the study examined the extent to which these factors affect nurses’ job satisfaction and their interest in leaving their current position. Twenty-five percent of nurses were found to experience moral distress, causing them want to leave their positions. Another 41% failed to say they would choose nursing as a profession again. Ulrich et al. found that “moral distress” led to feelings of powerlessness (33 %), feeling overwhelmed (35 %), frustration (53 %) and fatigue (40 %). They noted that the nurses’ desire to leave is, in part,

fueled by experiencing more "ethical stress" and an inadequate level of institutional support for dealing with ethical decisions, as well as a perception of little respect for their profession.

Storch and Kenny (2007) systematic analysis explored the challenges that are often faced by both nurses and physicians in working collaboratively with a focus on the ways in which each profession's preparation for practice has differed over time, including shifts in knowledge development and codes of ethics guiding professional practice. As a conclusion, physicians and nurses needed to sustain their unique strengths and work in true collaboration, recognizing their interdependence and the complementarity of their knowledge, skills and perspectives, as well as their common moral commitments. Accordingly, a call was made for envisioning nurses-physicians practice as shared moral work as well as using practical strategies to begin that work is offered in the study as a basis for reflection towards enhanced nurse-physician relationships.

Researchers have made an initial study of the relationship between moral distress and ethical climate. Thirty three percent of Redman and Fry (2000) study participants were experienced moral distress, and found that a high percentage of nurses experienced moral distress due to institutional constraints. Similarly, Corley et al. (2005) found in her study that moral distress frequency was positively correlated with moral distress intensity and a poor ethical climate.

In a qualitative study conducted by Austin, Bergum and Goldberg (2003) semi-structured interviews with six mental health nurses were initiated to describe their experiences of moral distress. The participants reported that they experienced moral distress when they lacked resources to give adequate care and when their concerns were not heard by the administration. It was also reported that the nurses thought that they were forced to deliver sub-optimal care in which the "patients' pain and screams could not be attended" (p.180). Furthermore, the

power imbalance within the hierarchical structure and the lack of collaboration between nurses and physicians were found to be common stressors among nurses. Organizational obstacles were cause of moral distress also in another qualitative study done by Erlen (2004) explored the commitment of 10 nurses to care for patients and the ethical dilemma with which nurses are grappling: caring for self versus caring for others. Erlen mentioned that nurses experience increasing fatigue and stress because of having little if any time for breaks, and because of mandatory overtime that results in less time off. The nurses perceived management to be unsupportive, and reported fewer peer available to support, greater feeling of isolation in difficult situations and higher moral distress. Erlen concluded that the ethical climate was a predictor of moral distress intensity. Recommendations given for possible actions included re-envisioning the profession of nursing, empowering nurses, providing support, and restructuring the work environment. Taken together, these actions have the potential to reduce the moral distress that nurses are experiencing and to enable them to honor their commitment to patient care.

In a descriptive, correlational study by Fogel (2007) on a sample of 100 critical care staff nurses from two tertiary level health care institutions in a Midwestern major metropolitan area of the United States. The study aimed to explore relationships between the levels of moral distress experienced by critical care nurses and the likelihood of a nurse leaving a position (intent to turnover), as well as moderating effects of these nurses' perceptions of the ethical climate of the work environment on intent to turnover. The results indicated that specific climate factors such as relationships with peers and managers as well as a feeling of competence in one's nursing skills moderated the effect of moral distress levels on intent to turnover.

Studies reported here indicate that the institutional setting contributes to moral distress. Health care institutions, particularly hospitals, are high-tech and fast paced, patients

are older and sicker, and reimbursement is problematic. Many nurses view themselves as powerless within this type of hierarchical system (Wilkinson, 1987-88; Corley, et al., 2001; Davies, et al., 1996; Sundin-Huard & Fahy, 1999). They perceive little support from nursing and hospital administration (Kelly, 1998; Corley, et al., 2001; Sundin-Huard & Fahy, 1999; Penticuff & Walden, 2000; Fenton, 1988). Nurses may experience moral distress as a result of being socialized to follow orders, having experienced futility of past actions, and having a fear of losing a job. Other organizational factors contributing to nurses' moral distress include nurses' views concerning the quality of nursing and medical care, organizational ethics resources, nurses' satisfaction with the practice environment and the law and/or lawsuits (Wilkinson, 1987-88). Relationships with physicians are the most frequently mentioned institutional constraints (Wilkinson, 1987-88; Corley, 1995; Davies, et al., 1996; Oberle & Hughes, 2001; Sundin-Huard & Fahy, 1999).

Relationships between physicians and nurses have generated instances of moral distress (Jameton, 1993). Jameton views the nurse-physician role division as irrational and arbitrary, inefficiently delineated and morally problematic. Nurses experience moral distress as a result of physicians and nurses having different moral orientations, different decision-making perspectives, and an adversarial physician/nurse relationship (Wilkinson, 1987-88; Davies, et al., 1996; Sundin-Huard & Fahy, 1999; Oberle & Hughes, 2001).

Similarly, several researches reported that physician and nurse working relationships were identified as a common source of moral distress among nurses working in all practice settings. Sources of distress within the physician and nurse relationship included cultural factors such as a perceived disparity in goals between medicine and nursing in which there seemed to be a philosophy of "care" among nurses and a philosophy of "cure" by physicians. Nurses often perceived that differences in values between nurses and physicians constrained nurses from acting on their beliefs. Another cultural element identified was a power

differential between nursing and physicians (Hefferman & Heilig, 1999; Sundin-Huard & Fahy, 1999; Oberle & Hughes, 2000; Gutierrez, 2005; Zuzelo, 2007).

In the same way, Maluwa (2008) qualitative research was conducted in health institutions of Lilongwe district in Malawi to assess knowledge and causes of moral distress among nurses among other purposes. Data were collected from a purposive sample of 20 nurses through in-depth interviews using a semi-structured interview guide. The researcher focused on one of the institutional constraints, namely, inadequate nursing staff that had been a long standing problem. The results indicated that the short staffing widened the nurse-patient/client gap thus impeded upon the nurses' ability to provide the quality care that the patients and clients need, and consequently lead to nurses experience moral distress. The respondent in Maluwa study reported many causes of moral distress; ten of the twenty respondents revealed that some hospital policies and regulations were in conflict with their responsibilities as nurses to their patients. In addition, fellow nurses and the others contribute to their moral distress. Seven of the twenty respondents reported that the most distressing factor occurs when colleagues reported for duties late, while six reported that lack of understanding among health workers to be a major cause of their moral distress. Relatively few respondent (4 out of 20) reported that doctors and clinicians also contribute to nurses' moral distress through shouting at them. Hospital management in Malawi results contributes to nurses' moral distress. The researcher observed some details related to this problem such as; hospital management gives no chance for discussions with nurses to solve ethical problem and the Lack of general staff

Pauly, et al., (2009) study results showed that peers, physician, and hospital management In addition to patients and nursing mangers were predictors for moral distress among nurses. A randomly selected sample of 374 registered nurses working in acute care hospitals in British Columbia were surveyed by Pauly, et al. nursing Corley's Moral Distress

Scale and Olson's Hospital Ethical Climate Survey (HECS). The results indicated moderate levels of moral distress intensity. Also Moral distress intensity and frequency were found to be inversely correlated with perceptions of ethical climate. Each of the HECS factors (peers, patients, managers, hospitals and physicians) was found to be significantly correlated with moral distress.

Mankour (2009) showed that 20% of new nurses leave the profession within a year. It asserted that multiple strategies must be explored and incorporated into the work environment to create caring environments that will enhance the ethical climate in today's workplace.

The relationship between moral distress and demographic characteristics was recognized in some previous studies. Hamric (2000) study showed that there is a negative correlation between age and level of moral distress and he suggested that a possible explanation for the association between moral distress and youth and inexperience in nurses is that younger nurses have not yet developed moral competency the ability to interpret moral situations, use good moral judgment, and engage in morally appropriate behavior. Hamric suggests that an internal obstacle along with an inability to identify ethical issues or a lack of alternatives also predisposes nurses to moral distress (Hamric, 2000). Similarly, Aiken, et al. (2001) conducted a study that included 43000 nurses practicing in 700 hospitals in five countries. The results that related to demographic characteristics especially the age of the participants indicated that one out of three registered nurses under the age of 30 was planning to leave their position within the next year because of moral distress.

Likewise, Meltzer and Huckabay (2004) study showed that nurses' age was found to be a significant predictor of emotional stress as younger nurses appeared to have somewhat more feelings of depersonalization than did older nurses. Furthermore, Meltzer and Huckabay reported a significant negative relationship between educational level and moral distress. They administered the Moral Distress Scale, and the Maslach Burnout Inventory to 60 critical

care nurses, worked full-time and had a minimum of 1 year of critical care experience at the 2 participating hospitals (350–470 beds). Results showed that nurses with a bachelor degree reflected significantly higher feelings of moral distress from advanced educational levels when dealing with experiences of futile care or inability to provide adequate care. The researchers suggested that nurses' knowledge of other treatment options and their experience influenced their perception and response to otherwise unethical decisions or plans. Consequently, new graduates have been found to experience less feelings of moral distress than more experienced nurses. In Hart's study (2005), nurses who experienced ethical conflict and had little or no ethics education reported higher intention to leave their current position. Correspondingly, that study found strong evidence that the ethical climate of the employing facility plays a significant factor in nurses' decisions to abandon the profession. Further findings from the same study advocate the introduction of comprehensive ethics education to curb the turnover of staff as a result of moral distress (Hart, 2005).

Another study done by Kalvemark , Hogland , Hansson , and Arnetz (2006) investigated moral distress in all health care, identified younger health care providers as having higher levels of moral distress. Although the sample in this study included pharmacists, pharmacy assistants, physicians, and auxiliary workers, nurses were by far the majority of the study's respondents. More studies found that the youngest group which included nurses experienced higher levels of moral distress (Sporrong, Hoglund, & Arnetz, 2006; Ulrich, et al., 2007; McClendon, & Buckner, 2007; Radzvin, 2011).
Conversely, many other studies found no correlation between demographic characteristics such as gender, education, age, years of nursing experience, and years of experience in the same institution with level of moral distress (Corley, 1995; Corley et.al, 2001; Corley, 2002; Corley, et al., 2005; Pauly, et al., 2009; & Winland et al., 2009).

Similar results were found in Elpern, et al. (2005) study which was conducted to evaluate associations among moral distress and individual characteristics of a total of 28 nurses working in a medical intensive care unit. Except for the years of nursing experience in nursing which were positively correlated with moral distress scores. Naturally, the longer ones occupancy in a position, the older the individual is likely to be. In addition, Radzvin (2011) study results indicated that doctoral prepared nurses had higher levels of moral distress than nurses prepared at the diploma, associate degree, bachelor's degree, and master's degree levels, and there was a negative relationship between years of experience and higher level of moral distress.

2.4. Summary and Conclusion

The body of evidence reported indicates that today's acute care environment presents nurses with difficult situations that may cause them to experience moral distress. Moral distress involves a unique, complex interrelationship of human relationships, institutional factors and personal attributes. A combination of situational factors, personal and interpersonal factors, and system factors are involved in the process of moral distress. Nurses' in literature reported that they often feel compelled to make ethical decisions that are counter to their professional and personal values in relation to various situations that arise in the clinical setting. These clinical issues include care-related decision making that nurses believe is counter to the expressed desires of the patient, aggressive or futile treatment of terminal patients, issues related to informed consent, working with incompetent nurses and physicians, and working under institutional policies that constrain ethical decision making and may interfere with the needs of patients. As a consequence of their decisions regarding these issues, nurses report experiencing moral distress. This experience is often manifested by such feelings as anger, guilt, sadness, fear, withdrawal, silence, not taking risks, and frustration and has been identified as a contributing factor to burnout and turnover in nursing.

The review of the moral distress literature describes the experience of moral distress in detail, but it also became apparent that there is also a process of moral distress embedded in the experiences. The process in which a nurse experiences moral distress begins with the identification of a moral conflict and continues through the phases of moral distress and a return to psychological equilibrium. A conceptual representation of the process of moral distress has been developed from the moral distress literature. The reviewed literature also revealed that moral distress may promote personal and professional growth and enable one to engage in more compassionate care. Creating an awareness of the moral distress that currently exists in healthcare is essential to assist the professions in creating a caring ethical environment in which professionals are respected, patients' wishes are honored, all individuals are valued, and persons enjoy going to work and don't want to leave. Previous research has suggested that moral distress is associated with perceptions of ethical climate and the nature of the ethical climate was found to be a predictor of moral distress intensity. Moral distress is an emotion that is expressed when the moral complexity of a situation is not leading to a resolution, thereby having the potential to cause harm to the individual nurse.

According to literature perception of the ethical climate of nurses is based upon the relationships with peers, patients, managers, hospital administration, and physicians when encountering ethical problems. Positive ethical climate may allow for the elimination of a barrier to moral action prior to the employee experiencing initial moral distress. A source of support for the nurses may be found within an organization in which they perceive an ethical climate. So a consistently supportive ethical climate may minimize the frequency and intensity of moral distress. The demographic variables of gender, education, ethics education, and work experience were listed in some studies as potentially having significant impact upon the experience of moral distress. While in other studies none of demographics were correlated to moral distress.

CHAPTER THREE

Methodology

The purposes of this study were to; assess Jordanian critical care nurses' level of moral distress (intensity and frequency) and their perception of hospital ethical climate, examine the relationship between the level of moral distress and the perception of hospital ethical climate, correlate selected demographic characteristics to the level of moral distress, and test the ability of selected demographic variables and variables related to perception of ethical climate to predict the level of moral distress among critical care nurses. This chapter presents the methodology used including design, sampling, sample size, sample, setting, ethical considerations, study instrument, data collection procedure, and data management.

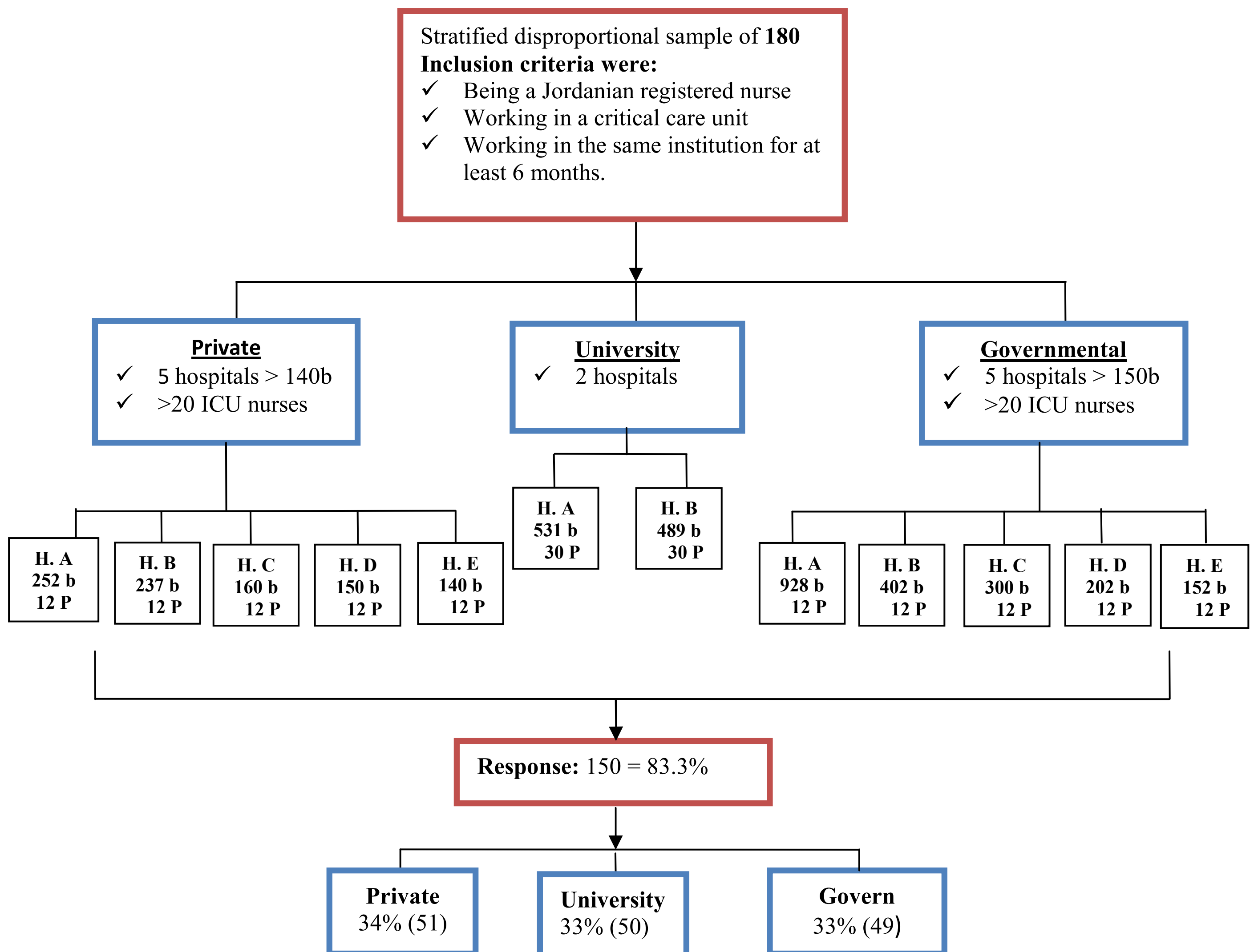
3.1. Study Design

A descriptive correlational design was used to examine the level of moral distress and the perception of ethical climate among critical care nurses in Jordan. This design is used for analyzing the naturally occurring relationships between the variables that may not be manipulated (Polit, Beck, & Hungler, 2002). Descriptive studies often lay the foundation for further, more rigorous studies (Polit & Beck, 2006). Given the gap in knowledge related to moral distress and the perception of ethical climate, there is a need to begin to lay a foundation for further studies.

3.2. Setting

This study was conducted in critical care units in hospitals in three of the four health care sectors in Jordan. Total of twelve hospitals were selected for more available nurses in critical care units. The two university hospitals were chosen because they are the only teaching hospitals in Jordan. The bed capacity and the number of critical care nurses were the criteria set to select the governmental and private hospitals. According to Ministry of health

(2007) annually statistics, the highest bed capacity hospitals where located in the middle of Jordan (Salt, Zarqa, & Amman the capital) and north (Irbid) of Amman. The five private, and five governmental hospitals with the highest bed capacity (> 150 beds for governmental) and (> 140 beds for private) and the largest number of critical care nurses (≥ 20 nurses) were included (figure 2). Critical care units in military hospitals were not included because of the difficulty of obtaining permission.



b: bed capacity, P: selected number of Participants

Figure 2: Sample & Setting schema

3.3. Sampling

3.3.1. Sample Size

The sample size of (118) participants was estimated for this study using a computer program developed by Faul and Erdfelder (1992), with a medium effect size 0.15, power of 0.8, and α (the risk of Type I error) at 0.05 as a compromised two tailed statistics, and utilizing multiple regression analysis of 10 independent variables: 1) demographical data includes (age, gender, years of professional experience, and employment years in the same hospital; 2) hospital ethical climate includes factors related to peers, patients, managers, hospital administrators, and physicians. The effect size was considered to be medium according to literature that supports the presence of moderate relationship among variables (Pauly, et al., 2009; Fogel, 2007). Although 118 participants were required in this study; 180 participants were selected to produce better power and more reliable findings and to compensate for uncompleted questionnaires.

3.3.2. Sample

The stratified disproportional random sampling was used to select the study participants. Equal numbers of nurses (60) were selected from each sector; 30 nurses from each university hospital, and 12 from each governmental and each private hospital. Finally, equal numbers of nurses were selected from each critical care unit in the selected hospitals. The selection of multiple sites for data collection was used to limit factors that are likely to affect the dependent variable (moral distress), and increase generalizability of the study (Polit, & Hungler, 2002).

Inclusion criteria were:

1. Being a only Jordanian registered with a minimum BSC degree;

2. Working in a critical care unit;
3. Working in the current institution for at least six months.

Exclusion criteria were:

1. Being non- Jordanian;
2. Nurses working in other than critical care unit;
3. Registered nurses with less than BSc degree (Diploma).

This study focused on critical care staff nurses engaged in direct patient care as opposed to nurses in a management or advanced practice role. Sufficient time spent with patients each week and minimum length of time to become exposed to the issues related to the critical care unit and the specific institutional work environment were determined to be necessary for accurate responses to the questions posed in the instruments.

The nurse manager in each unit was asked to provide the researcher with the list of names of the nurses working in the unit. The nurses were screened for eligibility for inclusion. Each eligible nurse was given a code number and this code number was written on a piece of paper. The papers were folded and a person outside the units was asked to select the sample to ensure randomization. Nurses who refused to participate (n= 20) were excluded from the sample and then another round of random sampling was performed to replace them.

3.4. Ethical Considerations

Approval for conducting the study was obtained from the ethical committee at the University of Jordan, Ministry of Health (MOH), and the selected hospitals.

The selected nurses were informed that participation is voluntary, and that they have the right not to answer a specific question, and that they can withdraw from this study at any time without penalty. Participants were instructed that the completion of the questionnaire is considered as a written consent for participation. The cover letter attached to each questionnaire included explanation about the study; an estimation of the time needed to

complete the questionnaires, a statement about consent to participate in the study and a statement clarifying the right to withdraw at any time without any consequences. Confidentiality of the information, risk and benefits, and the contact information of the researcher for further clarification if needed also mentioned in the cover letter (Appendix I).

3.5. Study Instrument

The study instrument includes three parts:

3.5. 1. The demographic data sheet (DDS)

The DDS was developed by the researcher based on a review of the literature. Demographic data included were gender, age, education, and experience as registered nurses, and length of employee in the current hospital. These items were selected because they have been found to have had significant findings in other studies related to moral distress (Appendix I).

3.5.2. Moral Distress Scale (MDS)

The MDS was developed by Corley (1995) to assess the nurses' level of moral distress. The moral distress scale (MDS) is a 38-item scale measuring moral distress intensity and frequency. Two 6-point Likert scales are included in front of each statement to assess the level of moral distress in terms of intensity (ranging from ‘none’ to ‘great extent’) and frequency (ranging from ‘none’ to ‘very frequently’). Principle component analysis of the scale done by Fogel (2007) yielded five factors with a minimum of three items loading on each. Based on the types of issues addressed in the items comprising each group, the factors were named: “Veracity” for issues related to truth telling or participation in situations that would foster less than full disclosure of activities to authorities, patients, or families (items 6,7,11,17,18,21,24,25,27) ; “End of Life” describing issues related to aggressive treatments that would be futile or prolong death (items 1,2,3,4,5,12,15,19,22,34); “Quality of Care by Others” discussing incompetent or poor patient care by other staff on the care team (items

13,16,29,30,31,32,33); “Justice” related to cost of healthcare that proscribes or places limits on patient care thus leading to decisions that are not in the best interests of the patients (items 9,10,14,20,26,28); “Quality of Care by Self” discussing situations that involve the individual nurse being compelled to go beyond one's level of professional competence or to participate in poor patient care practices (items 8,23,35). Content validity for the original instrument MDS was reported to be 100%. Cronbach’s alpha for intensity and frequency was 0.98 and 0.90 respectively (Corley, et al., 2005). (Appendix I)

3.5.3. Hospital Ethical Climate Scale (HECS)

The HECS was developed by Olson (1998) to assess nurses' perception of hospital ethical climate (HEC) The HECS is a 26-item self-administered survey that asks participants to rate their responses using a 5-point Likert scale ranging from 1 to 5 (1 = almost never true to 5 = almost always true). The HECS instructs participants to respond to five factors, including relationships with peers (Items 1,10,18,23), Patients (Items 2,6,11,19), Managers (Items 3,7,12,15,20,24), Hospital administrators (Items 4,8,13,16,21,25), and Physicians (Items 5,9,14,17,22,26). The higher the HECS score the more positive the ethical climate. Olson assessed construct validity using confirmatory factor analysis and internal consistency reliability was 0.91 using Cronbach’s alpha (Appendix I).

Permissions to use these tools (MDS, HECS) and to adopt them for the purpose of this study were obtained from the authors (appendix II).

3.5.4. Reliability and Validity of Instrument in the Current Study

Although the instrument had been tested for validity and reliability (Corley, et al., 2005) (Olson, 1998) yet it was submitted to a panel of Jordanian experts. The panel was composed of three nursing faculty members from the nursing school at the University of Jordan who were specialized in nursing administration. This process was achieved to assure face and

content validity of the instrument, in addition to an evaluation of the appropriateness of the items of the instrument to the Jordanian culture. Few changes were suggested by the panel of experts concerning rephrasing of some words, wording of sentences in some items, and removing some items that were not culturally acceptable. Changes were integrated in the final version.

Pilot Study: A pilot study was conducted to determine the feasibility of the research design, and to identify reading and understanding difficulties, and the length of time required for completing the instrument.

Eighteen critical care nurses from three hospitals representing three health sectors included in the pilot study. The pilot sample was not included in the main study sample. The sample selected for the pilot was in accord with the inclusion criteria of the main study. Permission to recruit participants for the pilot study was obtained through the university administration. A letter was sent to the university president through the dean of the faculty of nursing to intended hospitals.

The analysis of the MDS and HECS of the data collected for the pilot study was performed to determine correlations using Statistical Package for Social Science (SPSS) Version 17.0. The results of the pilot showed that Cronbach's alpha = .91 for the MDS and Cronbach's alpha =.91 for the HECS (please see Table 1). Also the results of the pilot study showed that nurses found the items in the two parts of the questionnaire easy to understand, they verbalized no need for translation from English to Arabic Language. A mean of 20 minutes for completion of the instrument was needed. None of the participants contacted the investigator for queries or requests for referral to manage discomfort associated with difficulties or upsets elucidated in patient care situations stimulated in the study instrument.

Table 3.1: Reliability index of MDS and HECS scales and subscales
N=18

Scale	No. of Items	Cronbach's alpha coefficient
Total MDS scale	35	0.91
Intensity subscale	35	0.85
frequency subscale	35	0.87
Total HECS scale	26	0.91
Peer	4	0.71
Hospital administrators	6	0.72
Manager	6	0.89
Patient	4	0.57
Physician	6	0.57

3.6. Data Collection Procedure

Meetings with the nursing managers in all 12 selected hospitals were conducted to inform them about the study and to gain their cooperation. The number and type of critical care units at each location were verified and permission to administer the study instrument to the nurses in each unit was sought from the clinical nurse managers. Each manager was consulted about the best method for distributing the instrument to their staff nurses. The researcher visited each unit and met each staff nurse who was selected randomly to explain the purpose of the study and to answer questions about the process. The instrument, accompanied with an envelope and a cover letter attached to each envelope, was distributed by the researcher to the selected sample in critical care units after a full explanation of the study. A total of 180 envelops included the following: DDS, MDS, and HECS were distributed to the sites. Data were collected during a 10 week time period from 1st May to mid-July, 2010. These envelopes were recollected by the researcher after one to two weeks period or upon nurses' requests to collect the envelopes earlier. A code to indicate the sector known only to the investigator was placed on the top corner of envelops for later analysis.

Of the 180 nurses selected, 10 instruments were not returned and 10 were not completed so they were excluded, and 10 instruments were excluded because they were partially completed (missing 20% or more of the responses). The response rate was 83.3 % (n=150). Thirty two percent 33 % (n=49) of those who completed the instrument were from governmental hospitals, 33 % (n=50) from private hospitals, and 34 % (n=51) from university hospitals.

Post hoc power analysis was done using medium effect size 0.15, α (the risk of Type I error) 0.05 as a compromised two tailed statistics, and a sample size of 150. Analysis yielded power of 0.90 (Faul and Erdfelder, 1992).

3.7. Data Management

Data Preparation: Coded information from the instrument was entered into data files using Statistical Package for the Social Sciences Version 17.0 (2007). The investigator was responsible for entry and screening, sorting and cleaning of data. Any participant submitting instrument with extensive missing responses for seven or more items, or approximately 20% of the total responses were not included in the analysis to avoid bias or poor representation of results (Cohen & Cohen, 1983).

Scoring system of the study instrument: descriptive statistics of the MDS was done first to determine which have the highest item and lowest "intensity of distress" and which item have the highest and lowest "frequency of distress". The frequency multiplied by the intensity scores was the indicator of "total moral distress". The average mean of each factor in moral distress score and the total moral distress was calculated.

For the HECS items, descriptive statistics to find the high and low scores for those questions were calculated. Then HECS total score was done by calculating the average mean score of all item responses.

To describe the moral distress intensity, frequency, total moral distress score, moral distress total score, and perception of hospital ethical climate the responses. They were categorized, after receiving the permission of the author of each instrument (Appendix II), as follows:

- Moral distress intensity: (0-2 low intensity, 2.1 -4 moderate, 4.1-6 high intensity)
- The moral distress frequency: (0-2 low frequency, 2.1-4 moderate, 4.1-6 high frequency)
- Total moral distress score (moral distress level)= (MD Intensity* MD Frequency): (0-4 low, 4.1-16 moderate, 16.1-36 high)
- The perception of hospital ethical climate: (1-2.33 negative perception, 2.34- 3.66 neutral perception, 3.67-5 positive perception)

Data analysis: The data obtained were analyzed using statistical package for social sciences (SPSS) version 17.0. All statistical procedures were performed at α=0.05 (2-tailed statistics). Descriptive statistics including Means, standard deviations, and actual ranges were reported for the following study variables including: age, years of professional experience, variables related to HECS (peers, patients, physicians, managers, and hospital administrators).All of which were examined prior to the analysis for linearity and outliers. Additionally, percentages and frequencies also reported for gender, education, and sector. Inferential analyses including Pearson correlation coefficient was performed to examine relationships between moral distress and those variables at ratio level (age, years of professional experience, employment years in same hospital, moral distress (intensity & frequency), total HECS, and variables related to HECS (peers, patients, physicians, managers, and hospital administrators). whilst point biserial was used to examine relationships between moral distress and those variables at nominal level (gender & education).

Finally, Regression analysis procedure was used to answer the fifth study question. since the regression analysis is used to model the value of a dependent scale variables based on its relationship to one or more predictors, multiple regression analysis was used to estimate the probability of recorded variables including sample demographics namely: age, gender, education, years of experience, employment years in the same hospital and the total hospital ethical climate score, and the factors related to hospital ethical climate (peers, patients, physicians, managers, and hospital administrators) to predict moral distress level, moral distress intensity, and moral distress frequency. Enter method was used to introduce predictors in regression model, and stepping method criteria was set using probability of F entry 0.05 and removal 0.1. Gender and educational level were dummy coded (0.1) for the purpose of running multiple regression as they are at nominal level. In addition, different entry methods of regression, different values of entry and removal of predictors, and examination of colinearity, skewness, and extreme variables was conducted to elucidate valid reliable results . For the same purpose, assumptions in regard to correlation and regression were also checked again including recorded variables. Multicollinearity was also examined and reported through the final regression analysis model.

Regression analysis showed the result of B; which is the strength of the relationship between the predictors and dependent variables. Standard error (SE); which is the standard error that represents residual value which displays information about variation not accounted in the model. Beta (β); that represents the value of standardized coefficient for the predictors, P value; the probability at which the hypothesis accepted or rejected, Tolerance; which is the percentage of the variance in a given predictor that cannot be explained by the other predictors, and variance inflation factor that greater than 2 is usually considered problematic (SPSS, 2007).

3.8. Summary

A descriptive, correlational design was used in this study to examine the level of moral distress and the perception of ethical climate among critical care nurses in Jordan. A total of 180 envelops included the study instrument that consists of three parts: DDS, MDS, and HECS were distributed to a disproportional random sample of Jordanian staff nurses who work in critical care units for at least 6 months at the same hospitals. Twelve hospitals from three sectors (governmental, university, & private) in Jordan were selected as the setting of this study, 60 participants were approached from each sector. Data were collected during a 10 week time period. Ethical considerations were ensured before distributing the instrument including: the anonymity of the participants, their rights to participate and withdraw, and confidentiality. All envelopes were distributed and recollected by the researcher. Data were analyzed for a total number of 150 participants using descriptive (mean, standard deviation, frequencies, ranges, & percentages) and inferential statistical (Pearson correlation, point biserial, & multiple regression).

CHAPTER FOUR

Results

4.1. Introduction

This study was trying to answer the following questions:

1. What is the level of moral distress experienced by Jordanian critical care nurses?
2. How do Jordanian critical care nurses perceive their hospital ethical climate?
3. What is the relationship between the level of moral distress and the ethical climate?
4. What is the relationship between selected demographics (age, gender, education, years of professional experience, and employment years in the same hospital) and the level of moral distress?
5. What are the predictors of moral distress among the selected variables (demographics and variables related to the perception of hospital ethical climate)?

The results are presented under the following headings: Characteristics of the sample, Level of Moral Distress, Perception of hospital ethical climate, Relationship of Moral Distress and Hospital Ethical Climate, Relationship of demographics and the level of moral distress, and Predictors of Moral distress.

4.2. Characteristics of the sample

Table (4.1) shows that of the sample (N=150), male and female participants were comparable with a mean age of 27 years old (SD=4.5, R=21-45). The majority of participants hold a Bachelor degree (n=143, 95%). Furthermore, participant of this study had an average of 4 years experience as registered nurses, and average of 3.3 years of employment in the same hospital.

Table 4.1: Description of demographic characteristics
N=150

Variables	*Range*	*Mean*	*Standard deviation*	**% (n)**
Gender				
Female	-	-	-	43% (65)
Male				57% (85)
Educational Level				
BSC	-	-	-	95% (143)
MSN				5% (7)
Sector				
Governmental	-	-	-	33% (49)
Private				33% (50)
Teaching				34% (51)
Age in years	21-45	27	4.2	-
Years of Professional Experience	6 months-20 years	4 years	3.9	-
Employment years in same hospital	6 months-20 years	3.3 years	3.4	-

4.3. Level of Moral Distress

Table (4.2) shows the participants' perceived moral distress in terms of intensity and frequency as indicated by the scores obtained on the Subscale to each, and the total moral distress. The moral distress intensity ranged from 0.50 to 5.20 and the mean of 2.76 was moderate with a SD of 0.92 for all participants. The highest mean score for moral distress intensity was for item #2 “Follow the family’s wishes to continue life support even though it is not in the best interest of "(3.52). The second highest mean score was for item 15 followed

by 3, 5, and 12 (3.33, 3.25, 3.22, and 3.08 consecutively). The lowest mean score was for item # 29 “Work with nurses who are not as competent as the patient care requires” (2.03), followed by items: 10, 20, 34, and 35 (2.11, 2.17, 2.35, and 2.49 consecutively).

Table (4.2) also shows that the moral distress frequency score that ranged from 0.80 to 4.90 and an overall moderate mean of 2.55 with a SD of 0.82 for all participants. The highest mean score for frequency was for item #3 “Carry out a physician’s order for unnecessary tests when the patient’s death expected” (3.40). The lowest mean score was for #20 “Provide better care for those who can afford to pay than those who cannot” (1.76). The highest five mean scores in descending order were reported for items (3, 2, 15, 5, and 29) with a means of (3.40, 3.30, 3.23, 3.15, and 3.01). The lowest five scores were for items (20, 34, 31, 10, and 35) with a means of (1.76, 1.86, 2.02, 2.15, and 2.15).

The total moral distress score ranged from 2.00 to 25.4 with a moderate mean score of 7.54 and a SD of 4.44 for the participants were presented in table (4.2). The highest mean score for total moral distress was for item # 15 (13.54) which was also the second highest mean score for intensity and the third highest score for frequency. The lowest mean score for total moral distress was for item #20 (5.66); the lowest mean score for frequency and the third lowest score for moral distress intensity.

Table (4.2) reflects that the items rated high for total moral distress were also rated high for both intensity and all were related to the end of life issues (15, 3, 5, 2, and 12), and the items rated low for total moral distress were also rated low for intensity and frequency (20, 34, 10, 31, and 35), except for item 29 which was rated as the 5^{th} highest items in frequency but the lowest item in intensity.

The mean scores and standard deviation for detailed moral distress intensity, frequency, and total moral distress for all MDS items are presented in appendix III.

Table 4.2: Rank order of the five highest and five lowest scores of moral distress intensity, frequency, and total moral distress
N=150

Variables		*Related factor*	*Mean*	*Standard deviation*
• Follow the family's wishes to continue life support even it is not in the best interest of the patient	Highest Intensity items	End of life care	3.52	1.73
• Continue to participate in care for a hopelessly injured who is being sustained on a ventilator		End of life care	3.33	1.94
• Carry out a physician's order for unnecessary test when the patient's death expected		End of life care	3.25	1.80
• Initiate extensive life-saving actions when I think it only when I think it only prolongs death		End of life care	3.22	1.89
• Carry out the physician's orders for unnecessary tests for treatments for terminally ill patients		End of life care	3.08	1.71
• Work with nurses who are not as competent as the patient care requires	Lowest Intensity items	Quality of care by others	2.03	1.77
• Let medical students perform painful procedures on patients only to increase their skill		Justice	2.11	1.83
• Provide better care for those who can afford to pay than those who cannot		Justice	2.17	1.88
• Ask the patient's family about donating organs when the patient's death expected		End of life care	2.35	1.90
• Be required to care for patients I am not competent to care for		Quality of care by self	2.49	1.82
Moral distress intensity Score			**2.76**	**0.92**
• Carry out a physician's order for unnecessary tests when the patient's death expected	Highest Frequency items	End of life care	3.40	1.89
• Follow the family's wishes to continue life support even it is not in the best interest of the patient		End of life care	3.30	1.69
• Continue to participate in care for a hopelessly injured who is being sustained on a ventilator		End of life care	3.23	1.94
• Initiate extensive life-saving actions when I think it only when I think it only prolongs death		End of life care	3.15	1.91
• Work with nurses who are not as competent as the patient care requires		Quality of care by others	3.01	1.76
• Provide better care for those who can afford to pay than those who cannot	Lowest Frequency items	Justice	1.76	1.64
• Ask the patient's family about donating organs when the patient's death expected		End of life care	1.87	1.73
• Work with non-licensed personnel who are not as competent as the patient care requires		Quality of care by others	2.02	1.75
• Let medical students perform painful procedures on patients to increase their skill		Justice	2.15	1.69
• Be required to care for patients I am not competent to care for		Quality of care by self	2.15	1.76
Moral distress frequency Score			**2.55**	**0.82**

Variables		Related factor	Mean	Standard deviation
• Continue to participate in care for a hopelessly injured who is being sustained on a ventilator	Highest Total moral distress items	End of life care	13.54	11.7
• Carry out a physician's order for unnecessary tests when the patient's death expected		End of life care	13.15	10.9
• Initiate extensive life-saving actions when I think it only when I think it only prolongs death		End of life care	13.05	11.5
• Follow the family's wishes to continue life support even it is not in the best interest of the patient		End of life care	12.94	10.7
• Carry out the physician's orders for unnecessary tests for treatments for terminally ill patients		End of life care	11.38	10.7
• Provide better care for those who can afford to pay than those who cannot	Lowest Total moral distress items	Justice	5.66	7.54
• Ask the patient's family about donating organs when the patient's death expected		End of life care	6.11	7.62
• Let medical students perform painful procedures on patients to increase their skill		Justice	6.53	8.48
• Work with non-licensed personnel who are not as competent as the patient care requires		Quality of care by others	6.79	8.58
• Be required to care for patients I am not competent to care for		Quality of care by self	7.05	8.40
Total Moral distress score			**7.54**	**4.44**

Table (4.3) shows the level of moral distress related to each factor as reflected by descriptive statistics. The highest mean score was for end of life of 10.7 with SD of 5.64 and a range of 2.00 to 30.3, followed by the veracity mean (8.89 with a SD of 5.47 and a range of 0.22 to 27.0), then the mean of quality of care by others (8.89 with a SD of 6.61 and a range of 0.00 to 31.3). Moral distress score was low for quality of care by self (8.49 with a SD of 6.32 and a range of 0.00 to 28.0), and was lowest for justice (7.95 with a SD of 5.25 and a range of 0.00 to 29.5).

Table 4.3: Level of moral distress related to each factor as reflected by descriptive statistics
N=150

Variables	*Range*	*Mean*	*Standard deviation*
Veracity	0.22-27.0	8.89	5.47
End of Life	2.00-30.3	10.7	5.64
Quality of care by others	0.00-31.3	8.89	6.61
Justice	0.00-29.5	7.95	5.25
Quality of care by self	0.00-28.0	8.49	6.32
Total Moral distress score	0.60-25.0	7.54	4.44

4.4. Perception of Hospital Ethical Climate.

Table (4.4) shows the rank order of the five highest and five lowest scores of perception of hospital ethical climate. It shows that the lowest scored item was for item #9 (2.67) “Physicians ask nurses for their opinions about treatment decisions.” while the highest scored item was for item #23 (3.75) “Safe patient care is given on my unit". The highest five items in progressive order were (23, 24, 11, 3, and 25) and they were related to the different factors of HECS. While the lowest five items were (9, 16, 13, 22, and 17) three of them related to relationship with physician, and the other two related to hospital administrators. The total perception was neutral with a mean of 3.33, SD of 0.58, and a range from 1.54 to 4.

The means and standard deviation scores of the detailed HECS items are presented in appendix III.

Table 4.4: Rank order of the five highest and five lowest scores of perception of hospital ethical climate
N=150

Variables		*Related factor*	*Mean*	*Standard deviation*
• Safe patient care is given on my unit.	Highest items	Peer	3.75	1.06
• My manager is someone I respect.		Manager	3.59	1.17
• Nurses use the information necessary to solve a patient care issue/problem.		Patient	3.58	0.92
• When I’m unable to decide what’s right or wrong in a patient care situation, my manager helps me.		Manager	3.57	1.06
• I am able to practice nursing on my unit as I believe it should be practiced.		Hospital A.	3.53	1.16
• Physicians ask nurses for their opinions about treatment decisions.	Lowest items	Physician	2.67	1.15
• Conflict is openly dealt with, not avoided.		Hospital A.	2.90	1.04
• The feelings and values of all parties involved in a patient care issue/problem are taken into account when choosing a course of actions.		Hospital A.	3.23	0.89
• Nurses and physicians here respect each others’ opinions, even when they disagree about what is best for patients.		Physician	3.07	1.16
• Nurses and physicians trust one another.		physician	3.23	1.10
Total Hospital Ethical Climate Score			**3.33**	**0.58**

Table (4.5) presents the perception of hospital ethical climate related to each factor as reflected by descriptive statistics. The highest average mean was for managers with a mean of 3.50, and SD of 0.74, followed by peers with a mean of 3.47, and SD of 0.70, then patients with a mean of 3.45, and SD of 0.60. The average mean of Hospital administrators was 3.20 with SD of 0.70, and the lowest average mean was for physicians 2.60 with SD of 0.70.

Table 4.5: Perception of hospital ethical climate related to each factor as reflected by descriptive statistics
N=150

Variables	*Range*	*Mean*	*Standard deviation*
Peers	1.00-5.00	3.47	0.70
Patient	1.50-5.00	3.45	0.60
Hospital administrators	1.30-5.00	3.20	0.70
Physician	1.30-4.00	2.60	0.70
Managers	1.20-5.00	3.50	0.74
Total Hospital Ethical Climate Score	1.00-5.00	3.33	0.58

4.5. Relationships between Moral Distress and Hospital Ethical Climate and nurses demographics

Table (4.6) shows the correlations of moral distress intensity, frequency, and total moral distress and demographics and contextual variables. The regarding the correlation between total moral distress and hospital ethical climate had no significant correlation on the overall level of moral distress including peers (r = -0.018, P= 0.82), patient (r = -0.081, P= 0.44), hospital administrators (r = -0.128, P= 0.11), managers (r = -0.003, P=0.18), and total HECS result (r =- 0.111, P= 0.96). Similar results were found for the correlation between moral distress intensity and hospital ethical climate. Whilst, Results show mild negative

significant correlation only between the moral distress frequency (r = - 0.177, P< 0.05) and physicians.

When examining demographic variables in relation to total moral distress; results show that gender (r = -0.005, P= 0.94), educational level (r = -.031, P= 0.71), age (r =.088, P=0.28), years of professional experience (r =-.103, P=0.21), and employment years in hospital (r =-.113, P= 0.16) were not significantly correlated with overall moral distress. Similarly, no significant correlation was found between demographic variables and moral distress intensity and frequency. These findings suggest that a multiplicity of factors studied may affect perceptions of the ethical climate and that there is an implicit complex relationship between the experience of moral distress and variables of the ethical climate, and demographic variables which required the need of further exploration.

Table 4.6: Correlations of moral distress intensity, frequency, and total moral distress and demographics and contextual variables
N=150

variables	Moral distress intensity	Moral distress frequency	Total moral distress
Gender	.090	.022	-.005
Educational Level	.103	.056	-.031
Age	.073	.071	.088
Years of professional experience	-.096	-.080	-.103
Employment years in hospital	-.144	-.008	-.113
Peers	-.002	-.003	-.018
Patients	-.004	-.003	-.081
Hospital administrators	-.064	-.096	-.128
Physicians	-.127	**-.177***	-.146
Managers	-.014	-.034	-.003
Hospital ethical climate score	-.071	-.067	-.111

* Correlation is significant at α=0.05 (2-tailed)

4.7. Predictors of Moral distress

Tables (4.7), (4.8), (4.9) show multiple regression analysis of predictors of total moral distress, moral distress intensity, and moral distress frequency. The results in table (4.7) indicate that none of the variables has prediction performance of total moral distress among critical care nurses and the prediction performance was (F=.95, P<0.001, R^2 = 0.07, adjusted R^2=-.003). Similar results were shown in tables (4.8, and 4.9), poor prediction performance of moral distress intensity and moral distress frequency (F=.65, P<0.001, R^2 = .05, adjusted R^2=-.026, and F=1.00, P<0.001, R^2 = .08, adjusted R^2=-.014).

These results indicate that these variables including: demographic (age, gender, education, years of experience, & employment years in same hospital) and variables related to hospital ethical climate (peers, patients, physicians, managers, & hospital administrators) were having no statistically significant prediction performance in relation to moral distress, however, they may retain a clinically significant performance on nurses' perception of moral distress at critical care settings as proposed in the current study framework.

Table 4.7: Linear Regression analysis of predictors of total moral distress N=150

Variables	*B*	*SE*	*β*	*P value*	*Collinearity statistics*	
					Tolerance	*VIF*
Gender	20.7	29.0	.063	.478	.857	1.16
Age	-5.78	9.32	-.148	.536	.119	8.43
Educational Level	-28.6	64.4	-.037	.657	.964	1.03
Years of Professional experience	8.04	10.1	.190	.429	.117	8.51
Employment years in hospital	5.44	7.75	.112	.483	.264	3.78
Peers	-8.65	7.16	-.150	.229	.433	2.30
Patients	-.806	7.92	-.012	.919	.490	2.04
Hospital administrators	4.32	7.02	.112	.539	.204	4.89
Physicians	.271	5.13	.007	.958	.360	2.77
Managers	-9.40	5.09	-.259	.067	.342	2.92
Hospital Ethical Climate	3.91	3.35	.362	.245	.070	14.2

* Predictors of total moral distress final model produced at α=0.05, F=.95, P<0.001, R^2 = 0.07, adjusted R^2=-.003.

Table 4.8: Linear Regression analysis of predictors with moral distress intensity N=150

Variables	*B*	*SE*	*ß*	*P value*	*Collinearity statistics* *Tolerance*	*VIF*
Gender	6.74	5.85	.103	.251	.857	1.16
Age	.816	1.87	.105	.664	.119	8.43
Educational Level	2.78	12.9	-.018	.830	.964	1.03
Years of Professional experience	-.639	2.04	-.076	.755	.117	8.51
Employment years in hospital	1.03	1.55	.107	.508	.264	3.78
Peers	-.595	1.44	-.052	.681	.433	2.30
Patients	.524	1.59	.039	.743	.490	2.04
Hospital administrators	.387	1.41	-.050	.784	.204	4.89
Physicians	1.13	1.03	.152	.273	.360	2.77
Managers	-.685	1.02	-.095	.505	.342	2.92
Hospital Ethical Climate	.061	.675	.028	.928	.070	14.2

* Predictors of moral distress intensity final model produced at α=0.05, F=.65, P<0.001, R^2 = .05, adjusted R^2=-.026.

Table 4.9: Linear Regression analysis of predictors with moral distress frequency N=150

Variables	*B*	*SE*	*ß*	*P value*	*Collinearity statistics* *Tolerance*	*VIF*
Gender	3.65	5.06	.063	.472	.857	1.16
Age	-1.08	1.62	-.158	.504	.119	8.43
Educational Level	-4.02	11.2	-.030	.720	.964	1.03
Years of Professional experience	1.34	1.76	.181	.446	.117	8.51
Employment years in hospital	.876	1.34	.103	.517	.264	3.78
Peers	-2.02	1.24	-.200	.107	.433	2.30
Patients	.207	1.37	-.017	.881	.490	2.04
Hospital administrators	1.16	1.22	.171	.342	.204	4.89
Physicians	1.31	.894	-.199	.145	.360	2.77
Managers	-1.38	.886	-.217	.121	.342	2.92
Hospital Ethical Climate	.197	.584	.104	.736	.070	14.2

* Predictors of moral distress frequency final model produced at α=0.05, F=1.00, P<0.001, R^2 = .08, adjusted R^2=-.014.

4.8. Summary

Results related to the five research questions for the current study were presented. The items rated high scores for total moral distress were also rated high scores for both intensity and frequency; all were related to the end of life issues. The total perception of hospital ethical climate was neutral. The highest and lowest items scores in hospital ethical climate scale were related to the nurses' perception toward health care team (peers, physicians). The analysis of the relationship between variables and total moral distress, intensity, and frequency showed no significant correlations except for the moral distress frequency mild negative correlation physicians. Additional information was also gained from the analysis of recorded variables using different entry methods of regression, different values of entry and removal of predictors to get valid and reliable results. Despite that all studied variables had no prediction performance in relation to total moral distress, intensity, and frequency among critical care nurses.

CHAPTER FIVE

Discussion

Many interesting items of note were found in the data from this study, especially when compared to previous studies using the same instruments. For example, the items that were causing the most distressful feelings and the high frequency of occurrence (based on highest mean MDS Intensity & frequency Subscales scores of items) in this current study were related to the end of life issues. Items in the HECS related to relationships among health care team members demonstrated the highest and lowest scores. In addition, one of the five factors that reflected by HECS "physicians" was mildly correlated with the moral distress frequency.

Interpretation of the findings in light of the previous work in the area of the study is presented. This chapter consists of four main sections as follows: discussion of the study's key findings in relation to the existing research regarding the phenomenon of moral distress, limitations, conclusion, implications for education, practice and health care delivery, and recommendations. The questions of the study will be used as the headings for the discussion.

Research Question 1: **What is the level of moral distress experienced by Jordanian critical care nurses?**

For the current study the total moral distress and the two subscales Intensity and Frequency had moderate mean scores. The findings of this study were congruent with many other studies (Kane, 2000; Corley, 1995; Fogel, 2007; Wheeler, 1994; & Chambers, 1996). The results of other studies (Corley, & Goren, 1998; Pauly, et al., 2009) showed low frequency and high intensity of moral distress. The results of the present study, however, were against the expectations of the researcher. The comments made by the participants, although the term moral distress is not commonly used among them, it is frequently experienced during day to day work in various hospitals. The participants in this study verbally reflected two

points of view through the comments they made to the researcher during data collection. Some participants described their situations of moral distress, and declared that each situation was soul touching, confirming the commitment that nurses have to their patients. While, other nurses thought that many of situations are not among their responsibilities. In addition, there are several explanations to the moderate score such as: a lot of nurses tackle morally relevant questions pertaining to the rightness or wrongness of decisions, treatments, or procedures, while feeling powerless to change situations they perceive to be morally wrong, and some registered nurses have come to normalize the degree of moral distress they are experiencing and may, therefore have seen the survey as irrelevant.

When more specifically looking at the intensity subscale of the MDS, the situations that were considered the highest in intensity in causing moral distress were those related to the suffering often seen in patients with complex, life threatening illnesses. The item that states, “Follow the family’s wishes to continue life support even though it is not in the best interest of the patient." received the highest score in the current study. This item was one of the five highest ranked mean scores in many other studies conducted using the MDS (Chambers, 1996; Corley et al., 2005; Elpern, 2005; Mobley, Rady, Verheijde, Batel, & Larson, 2007; Zuzelo, 2007; & Fogel, 2007). The same item reflects the participants' perceptions of what might be the best care for the patient from a professional point of view that is different from the family's wishes. The emotions and hopes of the family members that their loved one may get better is considered the main drive for their decision for continuing life support measures. On the other hand, removing assistive devices that lead to death goes under killing a soul. According to Sachedina (2011) the belief in God's immutable decree revealed in Muslims law not only reveals that the right to die is not recognized but also the right to be assisted in dying is ruled out. According to Balboni, et al. (2007), religion plays a role in end of life decisions. The findings of this study showed that religion was important to

68% of the participants. This was also congruent with the findings that 96% of United States adults express a belief in God and 70% identify religion as one of the most important influences on their decisions (Gallup, 1966).

According to Angus, Barnato, and Zwirble (2004) one of every 5 deaths in the United States involves hospitalization with use of intensive care. As highlighted in a recent review (Nelson & Danis, 2001), many ICU patients are dying while receiving aggressive interventions to extend life. This situation is a potential source of confusion, conflict, and distress among caregivers, patients, and patients' families. Evidence suggests that the patients and their families are not satisfied with end-of-life care in the ICU (Levy, 2001). Nurses also are often dissatisfied and distressed in providing end-of-life care. Recurring themes reported by nurses include concern about overuse of life-sustaining technologies, a profound sense of responsibility for patients' welfare, a desire to relieve suffering, and perceived unresponsiveness of physicians toward that suffering (Asch, 1996).

The highest scoring Intensity Subscale items for two other studies (Wheeler, 1994; & Corley, 1995) demonstrated a similar type of concern to this study about appropriate patient care. According to Wheeler, participation in aggressive technological care of a hopelessly injured person was the most problematic. For Corley, giving intravenous medication without circulatory support during resuscitation was the most distressing item.

Wilkinson (1985) indicated that the most frequently reported situations in patients' care that were associated with moral distress included prolonging life and performing unnecessary tests and treatments on terminally ill patients. This was also reported by several other studies that reported the frequency scores for moral distress (Corley, 1995; Chambers, 1996; Wheeler, 1994; Pauly et al., 2002; Corley et al., 2005; & Zuzelo, 2007). Similarly, the most frequent distressful situation (based on highest mean score on frequency

Subscale) in this current study was “Carry out a physician’s order for unnecessary tests and treatment when the patient’s death is expected". This result may reflect a lack of communication between nurses and physicians that may lead to unshared decisions regarding the best care for patients, which further widens the gap between nurses and physicians and causes recurrences of same situations. In fact, the five situations causing the most frequent Moral Distress are all related to end of life issues as presented in items (1, 2, 3, 5, 12, and 15) in MDS.

According to Hanna (2004) the experience of moral distress may be the result of nurses' own expert clinical judgment, permitting them early recognition of the futility of providing further care in some situations. Earlier in 1981, Davis reported survey results that described the content of ethical dilemmas faced by nurses. Prolonging life with heroic measures was identified by nurses in the United States as one of their most frequently occurring dilemmas. Omery, Henneman, Billet, Raines, and Saltzman (1995) identified the ethical issues faced by hospital-based nurses. They reported that issues related to end of life care, do-not-resuscitate decisions, conflicts over what is in a patient’s best interest, and dying with dignity were ranked high. The percentage of nurses who practiced in adult critical care who reported being faced with quality-of-life issues was higher than that of nurses from other practice areas. According to Meltzer and Huckabay (2004) "the frequency with which critical care nurses encountered moral distress situations involving futile care was directly and significantly related to the experience of emotional exhaustion" (p. 205).

Many factors contribute to high moral distress and repeated exposure to those situations. For example, healthcare professionals become concerned when they are obligated to give aggressive treatments or inadequate pain medication. This conflicts with the caregivers’ priority to maintain comfort for all patients if at all possible. In addition, The ever-increasing number and complexity of life-supportive techniques, limitations in predicting

mortality, heightened expectations of patients and patients' families for "good" outcomes, organizational reforms to increase efficiency, and institutional constraints such as staffing shortages and high workloads most likely contribute to the pervasiveness of experiences of moral distress in critical care.

The top five items with the highest total distress scores in the current study loaded on the End of Life issues. The item regarding "Continue to participate in care for a hopelessly injured person who is being sustained on a ventilator, when no one will make a decision to turn off the life support machine." had the first place for the Total Subscale scores. Issues regarding items in the End of Life factor and nursing workload can be very complex and it is clear that they should be given consideration. The concept of moral distress is best explicated via the specific situations that are reported as most upsetting or most frequently faced.

On the other hand, issues that appear to cause the least intensity of distress as perceived by the participants in this study, relate to the item that reads: "Work with nurses who are not as competent as the patient care requires". But unexpectedly the same item rated as the fifth highest frequent situation encountered by nurses in critical care units. In fact, this represents an issue that worth attention especially that Jordan is encouraging health care tourisms and is enjoying a good reputation in the field of health care services. Moreover, nurses need to be concerned about the competence of their colleagues practicing medical procedures on a patient only to improve skills was an issue that yielded low scores. It appears that this situation rarely occurs at the sites studied apparently not to the extent that it would be upsetting for the nursing staff. Meltzer and Huckabay (2004) eliminated this item when they modified the MDS and this seems to be a reasonable modification based on the findings of the current study.

Similarly low scores were reported for distress related to treatment decisions being affected by the patient's ability to pay. The nurses in this study indicated that this item is not a frequent or particularly upsetting occurrence. The settings of this study were private, governmental, and teaching but no differences were detected regarding this issue. An issue not reported in other studies using the MDS is related to concerns about approaching a family for an organ donation. This item was rated very low on the frequency subscale. The Intensity Subscale scores for this item were also relatively low. On several occasions during data collection the participants commented that there is a hospital staff member who holds the responsibility for speaking to all families about donation, so it is no longer an issue for nurses.

Question 2: **How do Jordanian critical care nurses perceive their hospital ethical climate?**

The perception of hospital ethical climate is associated with registered nurses' decisions to leave their job or to leave the nursing profession (Ulrich et al., 2007). The participants in the current study did not reflect neither negative nor positive perception of their ethical climate. This overall neutral perception makes it difficult to explain the high turnover rate (44%) reported by the Jordanian Nursing Council. It makes it also difficult to predict the nurses' intention to stay. Although some of the participants informally revealed to the researcher that they are not happy with their work environment and that they are seeking experience only to find better work opportunities somewhere else outside Jordan, yet, this situation was not reflected by their responses to the HECS. This may be because they thought that their answers could affect their work in case their managers see the answers despite the researcher's explanations that anonymity will be ensured. Neutral responses were also reported by Mrayyan (2006).

Mrayyan (2006) described 200 Jordanian nurses' job satisfaction in relation to hospital environment. The results indicated that nurses were ‘neither satisfied nor dissatisfied’ in their jobs in terms of external rewards such as salaries, vacations, scheduling and work opportunities; interaction at work with co-workers such as immediate supervisors and nursing peers, physicians, and the delivery care system, social contact with colleagues and other professionals after work, and belonging to ward and institutional committees, and participation in organizational decision-making. The neutral responses in Mrayyan study in term of nurses' interaction with peers, managers, and physician provide support to this study.

The importance of relationships among the health care team within the work environment was demonstrated in items with the highest and lowest scores on the HECS. The most positive perception was related to the nurses’ views of their colleagues and the perceptions that safe care was being given to patients. Similar results were reported by Ulrich et al. (2007). On the other hand, relationship with physicians in the intensive care units received the lowest scores indicating a negative view when the nurses were asked about "Physicians asking nurses for their opinions about treatment decisions". Another two items reflecting the relationship between nurse and physician had low mean scores. This showed the everlasting power struggle between nurse and physician and the power differential between nurses and doctors that can be both a barrier to good care. Communication between professions also has long been known to be a discord in facilitating an ethical climate among physicians and nurses. “Physicians and nurses are too often in conflict and/or separated from joint work for good patient outcomes” (Storch, & Kenny, 2007, p.488).

Interestingly, the question with the lowest overall score was concerned with a relationship between nurses and physician regarding cooperative decision making regarding the patient care. It appears that the participants in this study perceive that the suppression of opinions is the usual characterstics of their job. In (1998), McDaniel identified one of three

critical features of an ethical environment in health care settings as the ability of nurses to engage in discussions about patient care and treatment decision. Nurses felt subordinate to physicians, often feeling that they were not heard and had no impact on decision making (Oberle, & Hughes, 2001). Seago (1996) wrote that "a number of environmental issues have been identified by nurses in hospitals that are correlated with stress in their work including workload and poor staffing, dealing with death and dying, conflict with physicians, and strain of shift work" (p40). Aiken, et al. (2002) described an ideal organizational climate in which "nurses had more autonomy, more control over conditions of practice at the bedside, and better relationships with physicians" (p. 6). Further Gifford (2002) stated that the success of magnet hospitals has been linked empirically to nurse autonomy, nurse control over the patient care environment, and close relationships between nurses and physicians enhancing the exchange of vital information. (p. 14). Therefore, revealing and understanding the nature of healthcare organizational climates, their congruencies and their dissonance, is the first step in developing more cooperative, respectful, and meaningful workplaces which translate into reduced turnover, absenteeism, stress, and injury (Stone, & Gershon, 2006).

Another two items reflecting the relationship between nurses and unit managers were positively perceived by critical care nurses, which reveal the importance of employing highly qualified managers, and shows the participation of Jordanian nursing managers in their teams' conflict management.

The other two items with the low means on hospital ethical climate scale were related to nurse relationship with the hospital administration and specifically related to conflict management. This may reflect the nurses' slight capability to solve conflicts, and the hospital administration lack of involvement. This would be an area to identify a possible intervention. A culture of conformity may be an inherent value on critical care units when the safety and concern about life-threatening errors require nurses to respond quickly and consistently to

patient needs. This culture may stifle creative problem-solving and encourage passive behaviors rather than open disagreement and discussion. McDaniel (1995) used a tool to measure organizational culture and found that work satisfaction was highest for a "constructive" rather than a "passive-defensive" or an "aggressive-defensive" culture. In 1998, the same investigator identified one of three critical features of an ethical environment in health care settings as the ability of nurses to engage in discussions about patient care. McDaniel (1998) also reported that support from administrators was very important, which may be analogous to the importance of the nurse manager role in the perceptions of ethical climate found in this study.

Question 3: **What is the relationship between the level of moral distress and the perception of hospital ethical climate?**

The results of the current study indicate that moral distress level had no significant correlation with the participants' perception of hospital ethical climate, except for moral distress frequency and factors related to physicians that were mildly correlated. This suggests that moral distress should not be framed or focused only on the relationship of the five recorded factors (physicians, patients, managers, peers and hospital administrators) covered by HECS. Rather, further investigation of the ways in which organizational factors contribute to moral distress is needed. Corley et al. (2005) and others described, moral distress as a complex phenomenon influenced by a multitude of mitigating factors. On the contrary, many studies that aimed to examine the relationship between moral distress and ethical climate (Corley et al., 2005; Hamric & Blackhall, 2007; & Pauly, et al., 2009) found that moral distress level was positively correlated with poor ethical climate.

Regarding mild negative relationship between physicians and the moral distress frequency, the results supported negative perception reported by the participants in this study,

which was also related to physicians. This may be explained as a large number of young ages participants who were involved in the current study alongside with having lack of experience especially in communicating effectively with the physicians. According to Winland, Chiarenza, and Dobrin (2010) younger nurses have not developed critical communication skills to deal with physicians. In addition, Nursing in Jordan has developed rapidly in the recent years. This development elucidates proliferation of baccalaureate programs and accordingly establishs new nursing schools in many universities at governmental and private sectors. Because of the demand of nursing work forces, currently, there are 15 schools of nursing that graduate nurses with Bachelor's degree in Nursing Science (BSc). And according to the statistics of Ministry of Health (2007), there is 13117 Registered Nurses (RNs) in Jordan. Many of the nurses who studied nursing or working in the health field consider the profession as a source of earning money and not for life humanistic and caring purposes as nursing profession needs to be developed. Also in most institutions, nurses lack: governance, authority and autonomy, and the support of others. Further, nurses work in an unclear organizational structure and unclear job description. Consequently, they work without serious involvement in effective work environment alongside with physician. Additionally, nurses may lack the feeling of job security, especially at the private sector, which reduces their sense of work commitment and in advance reduces their feelings towards better hospital ethical climate and moral associated distress.

Nurses especially those working in critical care units are always struggling to balance between technology, competence, task proficiency, and attention to psychosocial needs of their patients. Thus, the knowledge and back ground about ethical issues in work climate is limited (Badger, 2003). Although nurses represent two thirds of the employees in any health facility, they have less support to continue their studies or to enroll in courses inside and outside the country compared to other health care professionals. Nurses have no incentives or

clinical ladders that promote and recognize their expertise (JNC report, 2003). All of which may lead Jordanian nurses working in hospitals to pay no attention to the hospital ethical climate, and to be away of engaging in any ethical situation. As a result, their perceptions regarding hospital ethical climate are superficial and lacking involvement, which may implicitly affecting their moral distress.

Question 4: **What is the relationship between selected demographics and the level of moral distress?**

The results of the present study indicated that none of the demographic variables (age, gender, years of professional experience, education, and employment years in the same hospital) were significantly correlated to total moral distress. This result was congruent with others (Corley, 1995; Corley et.al, 2001; Corley, 2002; Corley, et al., 2005; Pauly, et al., 2009; & Winland et al., 2009). Whereas in other studies, the results showed that their was a negative correlation between age, education, and years of professional experience (Hamric, 2000; Aiken, et al., 2001; Meltzer & Huckabay, 2004; Hart, 2005; Kalvemark, et al., 2006). Other studies investigated such relationships and showed positive correlation between moral distress and both age and years of nursing experience (Elpern, et al., 2005). In addition, Radzvin (2011) results reported positive correlation between moral distress and education. The sample of this study was involving critical care nurses who show some sort of consistency in their practice alongside their perception. For example, the greatest number of nurses whether male or female was young, holding BSc degree, having relatively low professional experience and short length of employment in the same hospital. This may explain the poor correlation between moral distress and the demographic characteristics. It seems that Jordanian critical care nurses perform several tasks consistent with their job description and adherent to hospital policies regardless of gender, work experience, or relations ships with patients, peers, and/ or health care professionals.

***Question 5:* What are the predictors of moral distress among the selected variables (demographics and variables related to the perception of hospital ethical climate)?**

Since no significant correlation was reported between moral distress and demographic characteristics of the participants in the current study and in congruence with the results reported by Corley (1995) and Corley et al. (2005); none of the demographic variables including (age, gender, years of professional experience, education, and employment years in the same hospital) were able to predict moral distress, moral distress intensity, and/or frequency.

Inspite the fact that many studies indicated moderate ability of the hospital ethical climate to predict the presence of moral distress (Corley et al., 2005; Hamric & Blackhall, 2007; & Pauly, et al., 2009), the results of the current study indicated that the participants' perception of hospital ethical climate and its five components including: peers, patients, physicians, mangers, and hospital administrators were unable to predict the moral distress, intensity, and frequency at Jordanian critical care settings. Although the predictors including (demographics, total HECS, & variables related to HECS) were controlled in two stages:1) the prediction performance within the moral distress in general and 2) the prediction performance when demographic variables are covariates; there was no prediction performance reported for all recorded variables and moral distress, moral intensity and frequency. Thus, there should be other factors beyond those assessed by the current study as represented and proposed through the framework, which may have influenced the prediction performance of moral distress among critical care nurses. Despite the fact that the current study didn't show statistically significant prediction results, it has a clinical merit that may help in establishing implications and recommendations of further research venue.

5.6. Study limitations

Considering the importance of the issue studied, and that this is the first study that tackled this issue, it's worth mentioning that generalization should be cautionly considered. The nature of the study, being descriptive, and the reliance on self reports of the respondents also carries the potential for demand characteristic effects. According to Waltz, Strickland, and Lenz (1991), "demand characteristic effects refer to respondents' deliberately monitoring responses to fit perceived demands…either those of the interviewer or of society" (p. 326). This potential for socially desirable responses may have been countered with the assurance of confidentiality and anonymity of all participants.

A limitation of this study, as in previous research that has attempted to measure moral distress, is that the MDS draws on Jameton's (1998) definition of moral distress with an emphasis on the inability of nurses to act due to institutional constraints rather than construing an inability to act as a function of a balance between individual and contextual constraints on moral action. Although Jameton's work has been very helpful in promoting dialogue about moral distress, the emphasis has been on institutional constraints, while the moral agency of nurses has largely been obscured. The clinical situations included in the MDS instrument do not necessarily reflect the extent of morally distressing circumstances, and scenarios that result in marked moral distress may have been missed.

5.7. Conclusions

As the first study that investigated issues related to moral distress and hospital ethical climate, the finding provided a foundation for the development of evidence-based interventions, designed to improve the nursing profession. This study has revealed that:

- Nurses in Jordan experience moral distress regardless of age, gender, work experience, or the years of experience in same hospital.

- Moral distress is a common encounter for nurses though they are not familiar with the term which implies that solutions to relieve their distress are unexplored.
- Jordanian nurses' concerns about end of life issues are associated with the higher levels of moral distress intensity and frequency which is consistent with previous studies.
- Nurses' own perception of hospital ethical climate is not correlated with moral distress.
- Data in the current study point to the importance of moral distress and the ethical climate in ICUs as variables worthy of further investigation.

5.8. Implications of the Study

This study has the potential to contribute to the evidentiary base for the relationship between moral distress and ethical climate and also the multiple factors that influence perceptions of ethical climate and the development of moral distress. There is a pressing need in Jordan for conceptual framework to generate a more robust understanding of moral distress in nursing practice and the relationship between moral distress, ethical climate, and other variables such as decisions to leave positions or nursing, and the impact on patient care. Such work could contribute to the development and refinement of new instruments to measure moral distress and ethical climate.

Furthermore, an analysis of moral agency in relation to organizational structures is required in order to enhance our understanding of moral distress in nursing practice and the possibilities for improving care. Examining the nature of moral distress in relation to the ethical climate has potential benefits for both nurses and patients. Given the current and future shortages of registered nurses, attention to moral distress and the development of positive ethical climates is of paramount importance to the evolution of quality work environments and quality patient outcomes.

5.8.1. Implications for Practice

Nursing and hospital management are the main beneficiaries of the result of this study. Considering the level of moral distress and the consequences it may have on quality of care and turnover rate, it becomes imperative to look at the predictors of moral distress. The present study indicated that the moral distress among critical care nurses from futile care and end of life care escalated in the critical care environment even among nurses with long experience. The absence of mechanisms to alleviate the moral distress related to repeated encounter of futile care situations also indicate that critical care nurses are displaying appropriate healthy emotional responses consistent with their conscience. Nurses are morally sensitive to the patient's vulnerability and experience external factors preventing them from doing what is best for the patient and they feel that they have no control over specific situations (Lutzen, Cronqvist, Magnusso, & Andersson, 2003). However, coping mechanisms to mitigate the effects of moral distress are necessary to decrease moral distress, enhance job satisfaction, and retention among critical care nurses (Mealer, Shelton, Berg, Rothbaum, & Moss, 2007). Taken together, these results suggest that interventions to minimize the encounter frequencies of futile care situations are also necessary to decrease moral distress in the critical care environment.

The findings also indicated that there is a negative significant relationship between nurses moral distress frequency and physicians. According to White, Braddock, Bereknyei, and Curtis, (2007) physicians and health care professionals must improve their communication and provide realistic goals of treatments and prognosis to patients and their families. The value of these findings is in confirmation of the importance of a positive and supportive relationship between managers and staff and among the nurses themselves in critical care areas.

Additionally, nursing administrators need to clearly identify morally worthy goals, examine unit cultures, identify causes of moral distress among nurses, provide support for collaborative decision making, create mechanisms to address abuses, support nurses and other providers who experience distress, and encourage nurses to tell their stories. Nurse administrators need to advocate for an ethical corporate culture, which Friedman (1992) proposed in his study should include honorable leadership, protection of and responsiveness to nurses who identify moral problems, encouragement toward ethical achievement, and avoidance of hypocrisy. Administrators should also implement strategies to support nurses who are experiencing distress.

Effective strategies include facilitating dialogue, encouraging nurses to be active participants in clinical and ethical decision making, developing support systems, providing opportunities for professional development, strengthening collaborative teamwork, and identifying and eliminating systematic patterns of dominance and subordination based on gender, race, and ethnicity (Jameton, 1992; Hamric, 2000; & Erlen, 2001).

5.8.2 Implications for Nursing Education

This study has several implications for educational programs in nursing with respect to moral distress. The evidence from this study suggests that educators should assess the ethical content in undergraduate and graduate nursing curricula to ensure that students are acquiring a practice-specific understanding of biomedical ethics and the skills necessary for working within systems to improve ethics related outcomes. Students should learn about the kinds of situations giving rise to moral distress, when providing end of life care. They need to be provided with realistic learning experiences such as, case studies, role playing, and simulation exercises that enable students how to prevent and cope with situations they may encounter in clinical practice, particularly clinical practice in critical care units.

5.8.3. Implications for Future Research

The nature and extent to which organizational factors contribute to moral distress require further attention in research. Given that some researchers have shown that nurses leave their positions because of moral distress (Corley, et al., 2005; Hamric and Blackhall, 2007; & Pauly, et al., 2009), there is a particular need to focus on the relationships among moral distress, intension to stay, recruitment, and retention. In addition, focusing on the role of hospital ethical climate as a mediating factor between moral distress and decisions to leave nursing is exceptionally needed by both quantitative and qualitative research for better understanding of these phenomena. Fruitful areas for future research include exploring also the situations giving rise to moral distress which pertained to the nurses' work environment are acknowledged.

5.9. Recommendations

Based on the results and conclusions of the present study, it is recommended that:

1. Further studies should be conducted addressing other variables than hospital ethical climate as a predictor of moral distress, different study designs, considering larger sample size, and other areas of specialization.
2. Communication between professionals in health care organizations should be studied using both quantitative and qualitative approaches. Emphasis needs to be on partnership in ethical decision making that related to patients in critical care units.
3. An analysis of moral agency in relation to organizational structures is required in order to enhance our understanding of moral distress in nursing practice and the possibilities for improving care. Examining the nature of moral distress in relation to the ethical climate has potential benefits for both nurses and patients. So the exploring the extent to which organizational factors contribute to moral distress requires further attention in research.

Given the current and future shortages of registered nurses, attention to moral distress and the development of positive ethical climates is of paramount importance to the evolution of quality work environments and quality patient outcomes.

4. Multiple strategies are needed for enhancing ethical climates in health care, empowering nurses, and eliminating their sensitivity toward physicians. Strategies with emphasis on the development of critical thinking skills can potentially empower nurses to address issues related to collaboration and ethical conflicts and diminish nurses' experience of moral distress from futile care. Individual and group support for staff can also be available to provide alternative guidance for coping with such situations.
5. A forum needs to be conducted for facilitating discussion of nurses' moral concerns and experiences of moral distress, as well as encouraging nurses to voice these concerns to physicians, patients, and families, would serve to augment nurses' coping abilities and support them in their role as moral agent. The forum could meet regularly, facilitated by a social worker or other appropriately trained leader, and include nurses from several patient care units and other care providers as desired, to aid in cost containment. Education may be included in this setting, if necessary, to allow for a common language for nurses to discuss moral issues with clarity and understanding.

References

Aarons, G., & Sawitzky, A. (2006). Organizational culture and climate and mental health provider attitudes toward evidence-based practice. **Psychol Serv**, 3: 61-72.

Aiken, L., Clarke, S., Sloane, D., Sochalski, J., Busse, R., & Clarke, H. (2001). Nurses' reports on hospital care in five countries. **Health Affairs**, 20, 43–53.

Aiken, L., Clarke, S., Sloane, D., Sochalski, J., & Silber, J. (2002). Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. **Journal of the American Medical Association**, 286, 1987-93.

American Association of Critical Care Nurses. (2004). AACN position statement on moral distress (Revised 1/2006). Retrieved from **http://www.aacn.org/AACN/pubpolcy.nsf/Files/MDPS/$file/Moral%20Distress**.

Angus, DC, Barnato, AE, & Linde-Zwirble, WT. (2004). Use of intensive care at the end of life in the United States: An epidemiologic study. **Critical Care Med**, 2, 638–64.

Asch, DA. (1996). The role of critical care nurses in euthanasia and assisted suicide. **Nursing Engl Journal of Med**. 334:1374-1379.

Austin, W., Bergum, V., & Goldberg, L. (2003). Unable to answer the call of our patients: Mental health nurses' experience of moral distress. **Nursing Inquiry**, 10, 177-183.

Badger, J. (2003). Nurses' experiences of moving from cure oriented to comfort oriented care in medical intensive care units. Digitalcommons@universityofRhodeIsland.

Balboni, T., Vanderwerker, L., Block, S., Paulk, E., Lathem, C., Peteet, J., & Prigerson, H., (2007). Religiousness and spiritual support among advanced cancer patients and associations with end of life treatment preferences and quality of life. **Journal of Clinical Oncology**, 25,5,555-560.

Barnett, A., & Schubert, E. (2002). Perceptions of the ethical work climate and covenantal relationships. **Journal of Business Ethics**, 36, 279-290.

Berger, M. C., Seversen, A., & Chvatal, R. (1991). Ethical issues in nursing. **Western Journal of Nursing Research**, 13, 514-521.

Butz, A, Redman, B, Fry, S, & Kolodner, K. (1998). Ethical conflicts experienced by certified pediatric nurse practitioners in ambulatory settings. **J Pediatr Health Care. 12**: 1–9.

Chambers, J. E. (1996). The effects of collaborative practice on levels of moral distress in critical care nurses. **Unpublished master's thesis**, University of Texas Graduate School of Biomedical Sciences at San Antonio.

Corley, M. (1995). Moral distress of critical care nurses. **American Journal of Critical Care**, 4, 280-285.

Corley, M, Goren, S. (1998).The dark side of nursing: impact of stigmatizing responses on patients. **Sch Inq Nurs Pract**, 12: 99–118.

Corley, M. (2000). Ethical work environment, nurse moral distress, and patient satisfaction with participation in treatment decision making. **poster presentation**. Proceedings of the Academy for Health Services Research Annual Meeting.

Corley, M., Elswick, R., Gorman, M., & Clor, T. (2001). Development and evaluation of a moral distress scale. **Journal of Advanced Nursing**, 33, 250-256.

Corley, M. (2002). Nurse moral distress: A proposed theory and research agenda. **Nursing Ethics**, 9,636-650.

Corley, M., Minick, P., Elswick, R., & Jacobs, M. (2005). Nurse moral distress and ethical work environment. **Nursing Ethics**, 12, 381-390.

Davies, B., Cook, K., O'Loane, M., Clarke, D., MacKenzie, B. Stutzer, C., Connaughty, & McCormick, J. (1996). Caring for dying children: Nurses' experiences. **Pediatric Nursing**, 22, 500-507.

Davis, AJ. (2008). Health Care System Transitions: What Is Missing in Nursing Ethics?. **Yale Ethics Conference**.

Elpern, E., Covert, B., & Kleinpell, R. (2005). Moral distress of staff nurses in a medical intensive care unit. **AJCC**, 14, 523-530.

Erlen, J. (2001). Moral distress: A pervasive problem. **Orthopedic Nursing**, 20, 76-80.

Erlen, J. (2004). Wanted Nurses ethical issues and the nursing shortage. **Orthopedic Nursing**, 23, 289-292.

Erlen, J. A., & Sereika, S. M. (1997). Critical care nurses, ethical decision-making and stress. **Journal of Advanced Nursing**, 26, 953-961.

Faul, F., & Erdfelder, E. (1992). GPOWER: A priori, post-hoc, and compromise power analyses for MS-DOS (computer program), Bonn, FRG: Bonn University, Department of Psychology.

Fenton, M. (1988). Moral distress in clinical practice: Implications for the nurse administrator. **Canadian Journal of Nursing Administration**, 3, 8-11.

Fogel, K. (2007). The Relationships of Moral Distress, Ethical Climate and Intent to Turnover among Critical Care Nurses. **Unpublished doctoral dissertation**.

Friedman, E. (1992). Ethics and corporate culture: Finding a fit. In E. Friedman (Ed.). Choices and Conflict (pp. 101-109). American Hospital Association Publishing.

Fritzsche, D. (2000). Ethical climates and the ethical dimension of decision making. **Journal of Business Ethics**, 24, 125-140.

Fry, S., Harvey, R., Hurley, A., & Foley, B. (2002). Development of a model of moral distress in military nursing. **Nursing Ethics**, 9, 373-387.

Gallup G., (1996). Religion in America: will the vitality of the church be surprise of the 1st century?. **Princeton Nursing Journal**.

Gifford BD. (2002). The relationship between hospital culture and nurses' quality of work life. **Journal Health care Manag**. 47: 13-26.

Gutierrez, K. (2005). Critical care nurses' perceptions of and responses to moral distress. **DCCN**, 24(5), 229-241.

Hamric, AB., and Blackhall (2007). Nurse-physician perspectives on the care of dying patients in intensive care units: Collaboration, moral distress, and ethical climate. **Critical Care Med,** 35(2), 422-429.

Hamric, A., (2000). Moral distress in everyday ethics. **Nursing Outlook**, 48, 199-201.

Hanna, D. (2004). Moral distress: The state of the science. **Research and Theory for Nursing Practice**, 18(1) 73-93.

Hart, S. (2005). Hospital ethical climates and registered nurses' turnover intentions. **Journal of Nursing Scholarship**, 37, 173-177.

Hefferman, P., & Heilig, S. (1999). Giving "moral distress" a voice: Ethical concerns among neonatal intensive care unit personnel. **Cambridge Quarterly of Healthcare Ethics**, 8, 173-178.

Jameton, A. (1984). Nursing practice: The ethical issues. **Englewood Cliffs, NJ**: Prentice Hall.

Jameton, A. (1993). Dilemmas of moral distress: Moral responsibility and nursing practice. **AWHONN's Clinical Issues**, 4, 542-551.

Jordanian data base for nursing research. (2011). Nursing research priority areas. **http://jdnr.edu.jo.**

Jordanian Nursing Council (2008). Manpower planning in Jordan. **Unpublished Report**.

Jordanian Nursing Council (2003). Manpower planning in Jordan. **Unpublished Report.**

Kalvemark S, Hogland AT, Hansson MG, Arnetz B. (2006). Living with conflicts – Ethical Dilemmas and Moral Distress in the Health Care System. **Social Science & Medicine. Oxford.**

Kane, K. (2000). The relationship between organizational climate and moral decision-making in pediatric registered nurses. **Unpublished doctoral dissertation**. Fordham University.

Kelly, B. (1998). Preserving moral integrity: A follow-up study with new graduate nurses. **Journal of Advanced Nursing**, 28, 1134-1145.

Kozier, and Erb's. (2007). Fundamentals of Nursing: Concepts, Process, and Practice. Eighth Edition. Upper Daddle River, New Jersy: Prentice Hall.

Krishnasamy, M. (1999). Nursing, morality, and emotions: Phase I and phase II clinical trials and patients with cancer. **Caner Nursing**, 22, 251-259.

Leino-Kilpi, H, Suominen, T, Mäkelä, M, McDaniel, C, & Puukka, P. (2002). Organizational ethics in Finnish intensive care units: staff perceptions. **Nursing Ethics**, 9, 126–36.

Levy, MM. (2001). End-of-life care in the intensive care unit: can we do better?. **Critical Care Med,** 29(2), 56-61.

Lutzen, K., Cronqvist, A., Magnusso, A., & Andersson, L. (2003). Moral stress: synthesis of a concept. **Nursing Ethics**, 10: 312-22.

Maluwa, V. (2008). Moral Distress in Nursing Practice in Lilongwe. **Unpublished dissertation**. Malawi.

Mancour, R. (2009). Hospitals fight to stop new nurses from quitting. **MSNBC on-line**. http://www.msnbc.msn.com/id/2921193/from/ET/ accessed 2/16/09.

Mayer, D., Kuenzi, M., & Greenbaum, R. (2007). Making ethical climate a mainstream management topic: A review, critique, and prescription for the empirical research on ethical climate. **Psychological perspectives on ethical behavior and decision making.** Greenwich, CT: Information Age Publishing.

McDaniel, C. (1995). Organizational culture and ethics work satisfaction. **Journal of Nursing Administration**, 25(11), 15-21.

McDaniel, C. (1998). Ethical environment, reports of practicing nurses. **Nursing Clinic of North America**, 33, 363-72.

McClendon, H., & Buckner, E. (2007). Distressing situations in the intensive care unit. **DCCN**, 26(5), 199-206.

Mealer, ML, Shelton, A, Berg, B, Rothbaum, B, & Moss, M. (2007). Increased prevalence of post-traumatic stress disorder symptoms in critical care nurses. **American Journal Respir Crit Care Med.**, 175:693-7.

Meltzer, L., & Huckabay, L. (2004). Critical care nurses' perceptions of futile care and its effect on burnout. **American Journal of Critical Care**, 13, 202-208.

Millette, B. E. (1994). Using Gilligan's framework to analyze nurses' stories of moral choices. **Western Journal of Nursing Research**, 16, 660-674.

Ministry of Health (2007). Jordanian National Health statistical report. Ministry of Health. **from http://www.moh.gov.jo/eheaderpage.htm.**

Mobley, M.,Rady, M., Verheijde, J.,Batel, B., & Larson, J. (2007). The relationship between moral distress and perception of futile care in the critical care unit**. Journal of Nursing Management**, 23, 256-263.

Mrayyan, M. (2005). Nurse Job satisfaction and retention: comparing public with private hospitals in Jordan. **Journal of Nursing Management**, 13, 40–50.

Mrayyan, M. (2006). Jordanian nurses' job satisfaction, patients' satisfaction and quality of nursing care. **International Nursing Review**, 53, 224–230.

Mrayyan, M. (2007). Jordanian nurses job satisfaction and intention to stay: comparing teaching and non-teaching hospitals. **Professional Nursing**, 23,125–36.

Nelson, JE, & Danis, M. (2001). End-of-life care in the intensive care unit: Where are we now?. **Crit Care Med**, 29, N2–N9.

Nightingale, F. (1859/1980). Notes on nursing: what it is and what it is not London: Churchill Livingstone.

Oberle, K., & Hughes, D. (2001). Doctors' and nurses' perceptions of ethical problems in end-of-life decisions. **J Adv Nurs**, 33,707-15.

Olson, L. (1995). Ethical climate in health care organizations. **International Nursing Review**, 42, 85-95.

Olson, L. (1998). Hospital nurses' perception of ethical climate of their work setting Image. **The Journal of Nursing Scholarship**, 30, 345-349.

Omery, A., Henneman, E., Bille,t B., Luna-Raines, M., & Brown-Saltzman, K. (1995). Ethical issues in hospital-based nursing practice. **J Cardiovasc Nurs**, 9, 43-53.

Pauly, B., Varcoe, C., Storch, J., & Newton, L. (2009). Registered nurses' perceptions of moral distress and ethical climat. **Nursing Ethics**, 16 (5), 561-573.

Pendry, P. (2007). Moral Distress: Recognizing it to Retain Nurses. **Nursing Economics**, 25(4), 217-221.

Penticuff, J., & Walden, M. (2000). Influence of practice environment and nurse characteristics on perinatal nurses' responses to ethical dilemmas. **Nursing Research**, 49, 64-72.

Polit, D., Beck C., and Hungler, B. (2002). Essemtial of nursing research: Methods, Appraisal, and Utilization. Philadelphia: Lippincott.

Polit, D. F. & Beck, C. T. (2006). Essential of nursing research: Methods, Appraisal, and Utilization. (6ed.). Philadelphia: Lippincott, Williams & Wilkins.

Radzvin, L. (2011). Moral Distress in Certified Registered Nurse Anesthetists: Implications for Nursing Practice. **AANA Journal,** 79, 1.

Raines, M. (2000). Ethical decision making in nurses: Relationships among moral reasoning, coping style, and ethics stress. **JONA's Healthcare Law, Ethics, and Regulation**, 2, 29-41.

Redman, B, Fry, S. (1996). Ethical conflicts reported by registered nurse/certified diabetes educators. **Diabetes Educ**. **22**: 219–24.

Redman, B, Fry, S. (1997). Ethical conflicts reported by certified nephrology nurses (CNNs) practicing in dialysis settings. **Am Nephrol Nurse Assoc J**. **24**: 23–31.

Redman, B, Fry, S. (1998). Ethical conflicts reported by certified rehabilitation nurses (CRRNs). **Rehabil Nurs. 23**: 179–84.

Redman, B, Fry, S. (1998). Ethical conflicts reported by registered nurse/certified diabetes educators: a replication. **J Adv Nurs**. **28**: 1320–25.

Redman, B., and Fry, S. (2000). Nurses' ethical conflicts: What is really known about them? **Nursing Ethics**, 7, 360-365.

Rice, E., Rady, M., Hamprick, A., Verheijde, J., Pendergast, D. (2008). Determinants of moral distress in medical and surgical nurses at an adult acute tertiary care hospital. **Journal of Nursing Management**, 16, 360–373.

Sachedina, A., (2011). Right to die? Muslim views about end of life decisions. **http://people.virginia.edu/aas/article/htm.**

Seago JA. (1996). Work group culture, stress, and hostility: Correlations with organizational outcomes. **Journal of Nursing Administration**, 26(6): 39-47.

Sporrong, A.K., A.T. Hoglund, & B.Arnetz. (2006). Measuring moral distress in pharmacy and clinical practice. **Nursing ethics**, 13(4), 416-427.

Statistical Package for the Social Sciences (2007), Applications guide. Chicago: SPSS.

Stone P., and Gershon R. (2006). Nurse work environments and occupational safety in intensive care units. **Policy Polit Nurs Pract**, 7: 240-247.

Storch, J.L., & Kenny (2007). Shared moral work of nurses and physicians. **Nursing ethics**, 14(4),478-491.

Suliman, W., & Abu Gharbieh, P. (1996). Jordanian Nurses: Job Dissatisfaction & Anticipated Withdrawal from Practice". **Dirasat: Medical and Biological Sciences**, 24 (2), 76 – 87.

Sundin-Huard, D., & Fahy, K. (1999). Moral distress, advocacy and burnout: Theorizing the relationships. **International Journal of Nursing Practice**, 5, 8-13.

Ulrich, C., O'Donnell, P., Taylor, C., Farrar, A., Danis, M., & Grady, C. (2007). Ethical climate, ethics stress, and the job satisfaction of nurses and social workers in the United States. **Social Science & Medicine**, 65, 1708–1719.

Ulrich, C.M.,.Hamric, & Grady (2010). Moral distress: A growing problem in the health Professions. **Hastings Center Report**, 49(1), 20-22.

Victor, B., & Cullen, J. (1988). The organizational bases of ethical climate. **Administrative Science Quarterly,** 33, 101-125.

Viney, C. (1996). A phenomenological study of ethical decision-making experiences among senior intensive care nurses and doctors concerning withdrawal of treatment. **Nursing in Critical Care**, 1, 182-187.

Waltz, C., Strickland, O., & Lenz, E. (1991). Measurement in nursing research, (2nd edition). Philadelphia: Davis.

Webster, G., & Baylis, F. (2000). Moral residue: Margin of error: The ethics of mistakes in the practice of medicine, 217-230. Hagestown: University Publishing Group.

Wheeler, B. J. (1994). Neonatal intensive care nurses and the experience of moral distress. **Unpublished master's thesis**, University of Manitoba, Winnipeg, Manitoba, Canada.

White, DB, Braddock, CH, Bereknyei, S, & Curtis, JR. (2007). Toward shared decision making at the end of life in intensive care units: opportunities for improvement. **Arch Intern Med**, 167, 461-7.

Wilkinson, J. M. (1987/88). Moral distress in nursing practice: Experience and effect. **Nursing Forum**, 23, 16-29.

Wilkinson, J. M. (1989). Moral distress: A labor and delivery nurse's experience. Journal of Obstetrics, **Gynecology and Neonatal Nursing**, 18, 513-519.

Wimbush, J., Shepard, J., & Markham, S. (1997). An empirical examination of the multi dimensionality of ethical climate in organizations. **Journal of Business Ethics**, 16, 67-77.

Winland-Brown,J., & A.Dobrin. (2009). A comparison of physicians" and nurses" responses to selected ethical dilemmas, **Forum on public policy online**. Spring.2009. edition.http://forumonpublicpolicy.com/spring09papers/papers09spring.html.

Winland, J., Chiarenza, D., & Dobrin, A. (2010). Nurse-Physician perspectives on moral distress support the need to create a caring ethical work environment, **Published by the Forum** on Public Policy.

Zuzelo, P. (2007). Exploring the moral distress of registered nurses. **Nursing Ethics**, 14, (3).

Appendix I

Cover Letter

The demographic data sheet (DDS)

Moral Distress Scale (MDS)

Hospital Ethical Climate Scale (HECS)

Cover Letter

المعاناة الأخلاقية لدى الممرضات/الممرضين وإدراكهم للبيئة الأخلاقية في المستشفى

عنوان الدراسة: المعاناة الأخلاقية لدى ممرضي/ممرضات الرعاية الحثيثة في الأردن وإدراكهم للبيئة الأخلاقية للمستشفى.

الغرض من الدراسة: الغرض من هذه الدراسة هو وصف مستوى المعاناة الأخلاقية لدى ممرضي/ممرضات الرعاية الحثيثة في الأردن وإدراكهم للبيئة الأخلاقية للمستشفى، ودراسة العلاقة بين مستوى المعاناة الأخلاقية والإدراك للبيئة الأخلاقية وبعض المتغيرات الديموغرافية المختارة.

تعريف المعاناة الأخلاقية: هي المعاناة البدنية أو العاطفية التي يختبرها الشخص عند وجود قيود (داخلية أو خارجية) تمنعه من اتباع مسار العمل الذي يعتقد أنه هو الحق أو الصحيح" (بندري ، 2007).

الإستبانة سوف تقيس التصورات الخاصة بك على بعدين :

1) مستوى المعاناة الأخلاقية و

2) تكرار هذه الحالة

تعريف البيئة الأخلاقية: النظر إلى البيئة داخل المستشفى التي تشجع التفكير الأخلاقي ، وتسمح بالاستفسار والمناقشة ، والتعبير عن وجهات النظر المختلفة ، مما يحفز القيم الأخلاقية ، والثقة المتبادلة لدى كل فرد. (أولسون ، 1998).

الإستبانة سوف تقيس التصورات الخاصة بك للمناخ الأخلاقي في الممستشفى من خلال تقييمك للعلاقات مع الزملاء من الممرضين و الممرضات ، والمرضى ، والمديرين ، والأطباء ، والمستشفي نفسه.

ماذا عليَّ أن أفعل ؟ تحتوي هذه الدراسة على 3 استبيانات من الممكن إكمالها في الوقت الذي تختاره خلال أسبوع من تاريخ استلامها. المدة التي تستغرقها تعبئة هذه الاستبيانات تتراوح بين 20-25 دقيقة. **من فضلك ،** يرجى قراءة التعليمات بعناية لكل استبيان والإجابة على جميع البنود، وإعادة الاستبيانات مستكملة في الظرف المرفق مختوم. لا توجد إجابة صحيحة أو خاطئة للأسئلة إنما هي بيان لوجهات النظر فقط. هناك حاجة لاستجابة صادقة لديكم لزيادة فهم القضايا المعنية.

ضمان السرية: كل المعلومات المقدمة لغرض هذه الدراسة ستعامل بسرية تامة واسمك لن يعرّف به بأي وقت. ولن يطلع على هذه الاستبيانات إلا الباحث الرئيسي والمشرف على البحث.

الأخطار: لا توجد أخطار تنتج عن المشاركة في الدراسة ، ربما يحصل شعور بعدم الارتياح المرتبط بتذكر تجارب الماضي المؤلمة.

منافع البحث: نتائج هذه الدراسة سوف تساعد مديري المستشفيات ومديري التمريض في تحديد العوامل التي تسهم في المعاناة الأخلاقية من المنظور الخاص بالممرضات ، و يسهم ايضا بالمساعدة في تخطيط وتنفيذ استراتيجيات للحد من هذه المعاناة بين الممرضات في وحدات العناية الحثيثة مما قد يسهم في تحسين نوعية الرعاية التمريضية. بالإضافة إلى ذلك

المشاركة في الدراسة تشمل إتاحة الفرصة لتبادل الخبرات بين ممرضات و ممرضي الرعاية الحثيثة. ويمكن استخدام النتائج من هذه البيانات لتوسيع المعرفة التمريضية.

الفوائد والحرية الشخصية بالانسحاب من الدراسة: يمكنك اللإنسحاب في أي وقت من الدراسة بدون أية عواقب. يمكنك الاستفسار عن أي سؤال في الاستبيانات من الباحث.

تصريح بالموافقة: أن تعبئة الاستبيانات لهذه الدراسة تعني موافقتك على أن تكون/تكوني احد الممرضات/الممرضين المشاركين في هذا البحث الذي تقوم به ربيعة سليم علاري طالبة الدكتوراه/كلية التمريض/الجامعة الأردنية.

مع جزيل الشكر على مشاركتكم في الإجابة على استبيانات هذه الدراسة.

عنوان الباحث: ربيعة علاري/ طالبة دكتوراه / كلية التمريض في الجامعة الأردنية , هاتف :........................

المشرف: دكتورة فتحية أبو مغلي/ كلية التمريض / الجامعة الأردنية هاتف: ....

Demographic Data Sheet

Directions: These questions concern the backgrounds of those who respond to this survey. As with all answers to this survey, your responses will be kept confidential. Please circle the appropriate answer or fill in the blank.

1. Are you?

Female Male

2. What is your age?..

3. What is your degree of nursing education?

Baccalaureate Master's Doctoral Degree

4. How long have you have worked as a Registered Nurse? ……………………

5. How long have you been employed at your present hospital?..........................

6. In which sector you are working?

Governmental Teaching Private

MORAL DISTRESS SCALE

Moral distress is "the physical or emotional suffering that is experienced when constraints (internal or external) prevent one from following the course of action that one believes is right" (Pendry, 2007).

This scale measures your perceptions on two dimensions:

1) level of moral distress, and
2) frequency of this situation

The following situations occur in clinical practice. These situations may or may not cause moral problems for you. For your current position, please indicate for each of the following situations, the extent to which you experience **MORAL DISTRESS** and its **FREQUENCY**. If you do not have experience with the situation, please indicate 0 in both columns.

Please answer by checking the appropriate column for each dimension:

		Moral Distress							Frequency						
		None great extent							Never very frequent						
		0	**1**	**2**	**3**	**4**	**5**	**6**	**0**	**1**	**2**	**3**	**4**	**5**	**6**
01	Follow the family's wishes for the patient's care when I do not agree with them but follow their wishes because hospital administration fears a lawsuit.														
02	Follow the family's wishes to continue life support (patient on assistive devices) even though it is not in the best interest of the patient.														
03	Carry out a physician's order for unnecessary tests and treatment.														
04	Assist a physician who performs a test or treatment without informed consent.														
05	Initiate extensive life-saving actions when I think it only prolongs death.														
06	Ignore situations of suspected patient abuse by caregivers.														
07	Ignore situations in which patients have not been given adequate information to insure informed consent.														
08	Carry out a work assignment in which I do not feel professionally competent.														
09	Avoid taking action when I learn that a nurse colleague has made a medication error and does not report it.														

		Moral Distress							Frequency						
		None						great extent	Never						very frequent
		0	**1**	**2**	**3**	**4**	**5**	**6**	**0**	**1**	**2**	**3**	**4**	**5**	**6**
010	Let medical students perform painful procedures on patients only to increase their skill.														
011	Assist physicians who are practicing procedures on a patient after CPR has been unsuccessful.														
012	Carry out the physician's orders for unnecessary tests and treatments for terminally ill patients.														
013	Work with levels of nurse staffing that I consider "unsafe."														
014	Carry out orders or institutional policies to discontinue treatment because the patient can no longer pay.														
015	Continue to participate in care for a hopelessly injured person who is being sustained on a ventilator, when no one will make a decision to turnoff the life support machines.														
016	Observe without taking action when health care personnel do not respect the patient's privacy.														
017	Follow the physician's order not to tell the patient the truth when he/she asks for it.														
018	Assist a physician who in your opinion is providing incompetent care.														
019	Prepare an elderly man for surgery to have a gastrostomy tube put in, who is severely demented (has dementia) and a DNR (no CPR).														
020	Provide better care for those who can afford to pay than those who cannot.														
021	Follow the family's request not to discuss death with a dying patient who asks about dying														
022	Providing care that does not relieve the patient's suffering because physician fears increasing dose of pain medication will cause death														
023	Give medication intravenously during a CPR with no compressions or intubation.														

		Moral Distress							Frequency						
		None						great extent	Never						very frequent
		0	1	2	3	4	5	6	0	1	2	3	4	5	6
024	Follow the physician's request not to discuss CPR or DNR status with patient.														
025	Follow the physician's request not to discuss CPR or DNR status with the family when the patient becomes incompetent.														
026	Not being able to offer treatment because the costs will not be covered by the insurance company.														
027	Follow the physician's request not to discuss death with a dying patient who asks about dying.														
028	Follow orders for pain medication even when the medications prescribed do not control the pain.														
029	Work with nurses who are not as competent as the patient care requires.														
030	Work with nursing assistants who are not as competent as patient care requires.														
031	Work with non-licensed personnel who are not as competent as the patient care requires.														
032	Work with physicians who are not as competent as the patient care requires.														
033	Work with support personnel who are not as competent as the patient care requires.														
034	Ask the patient's family about donating organs when the patient's death expected.														
035	Be required to care for patients I am not competent to care for.														

Hospital Ethical Climate Survey

Ethical climate is "the perceived environment within an organization that promotes ethical reflection, and allows for inquiry, debate, and expression of differing viewpoints, while promoting each individual's values and mutual trust" (Olson, 1998).

- Here is a series of statements relating to various practices within your work setting.
- Please respond in terms of how it is in your current job on your unit.
- As you read and respond to each statement, think of some difficult patient care issues you have faced.
- For those items that refer to your manager, think of your immediate manager (nurse manager, assistant nurse manager, shift supervisor).
- **It is important that you respond in terms of how it really is on your unit, not how you would prefer it to be.**
- It is essential to answer every item. *There are no right or wrong answers*, so please respond honestly.
- Remember, all your responses will remain anonymous.

Please read each of the following statements. Then, circle one of the numbers on each line to indicate your response.

		Almost Never True	Seldom True	Sometimes True	Often True	Almost Always True
1	My peers listen to my concerns about patient care	1	2	3	4	5
2	Patients know what to expect from their care	1	2	3	4	5
3	When I'm unable to decide what's right or wrong in a patient care situation, my manager helps me	1	2	3	4	5
4	Hospital policies help me with difficult patient care issues/problems	1	2	3	4	5
5	Nurses and physicians trust one another	1	2	3	4	5
6	Nurses have access to the information necessary to solve a patient care issue/problem	1	2	3	4	5
7	My manager supports me in my decisions about patient care	1	2	3	4	5
8	A clear sense of the hospital's mission is shared with nurses.	1	2	3	4	5
9	Physicians ask nurses for their opinions about treatment decisions	1	2	3	4	5

		Almost Never True	Seldom True	Sometimes True	Often True	Almost Always True
10	My peers help me with difficult patient care issues/problems	**1**	**2**	**3**	**4**	**5**
11	Nurses use the information necessary to solve a patient care issue/problem	**1**	**2**	**3**	**4**	**5**
12	My manager listens to me talk about patient care issues/problems	**1**	**2**	**3**	**4**	**5**
13	The feelings and values of all parties involved in a patient care issue/problem are taken into account when choosing a course of actions	**1**	**2**	**3**	**4**	**5**
14	I participate in treatment decisions for my patients	**1**	**2**	**3**	**4**	**5**
15	My manager is someone I can trust	**1**	**2**	**3**	**4**	**5**
16	Conflict is openly dealt with, not avoided	**1**	**2**	**3**	**4**	**5**
17	Nurses and physicians here respect each others' opinions, even when they disagree about what is best for patients	**1**	**2**	**3**	**4**	**5**
18	I work with competent colleagues	**1**	**2**	**3**	**4**	**5**
19	The patient's wishes are respected	**1**	**2**	**3**	**4**	**5**
20	When my peers are unable to decide what's right or wrong in a particular patient care situation, I have observed that my manager helps them	**1**	**2**	**3**	**4**	**5**
21	There is a sense of questioning, learning, and seeking creative responses to patient care problems	**1**	**2**	**3**	**4**	**5**
22	Nurses and physicians respect one another	**1**	**2**	**3**	**4**	**5**
23	Safe patient care is given on my unit	**1**	**2**	**3**	**4**	**5**
24	My manager is someone I respect	**1**	**2**	**3**	**4**	**5**
25	I am able to practice nursing on my unit as I believe it should be practiced	**1**	**2**	**3**	**4**	**5**
26	Nurses are supported and respected in this hospital	**1**	**2**	**3**	**4**	**5**

Appendix II

Permission letter for MDS

Permission Letter for HECS

Permission for MDS results categories

Permission for HECS results categories

Permission letter for MDS

Email

From: **Mary C Corley/FS/VCU** (mccorley@vcu.edu)

Sent: Friday, October 02, 2009 5:02:47 PM

To: rabia allari (rabia_allari1@hotmail.com)

Cc: mccorley@vcu.edu

Dear Rabia,

I am pleased to learn of your interest in the Moral Distress Scale. I will attach it to this e-mail. Other researchers are working on improvements for the Scale. If you do not plan to use it immediately, please contact me to see if the improvements are completed. Also you may find that some of the terms and items are not appropriate in your country. Please let me know what changes you need to make or which items need clarification. I assume that you are planning to administer the Scale in its English version. A doctoral student in the US is translating the Moral Distress Scale into Arabic. I do not know if he has completed his work, but if you are interested, please let me know.

Permission Letter for HECS

September 2, 2010

Rabia Allari

PhD student

University of Jordan

Dear Rabia:

I am writing to grant you permission to use the tool I developed, the *Hospital Ethical Climate Survey* (1995) in your research on *Moral distress among Jordanian critical care nurses and their perception of hospital ethical climate.* I have read your proposal with interest. I wish you much success in your dissertation research, and would appreciate your sharing the results with me upon completion.

Please feel free to contact me at any time with questions or comments.

Thanks for your interest in using the *Hospital Ethical Climate Survey.*

Sincerely,

Linda L. Olson

Linda L. Olson, PhD, RN, NEA-BC

Permission for MDS results Categories

Email

To rabia_allari1@hotmail.com

From: **Mary C Corley/FS/VCU** (mccorley@vcu.edu)

Sent: Wednesday, March 09, 2011 4:11:22 PM

To: rabia_allari1@hotmail.com

Dear Rabia,
I did receive the chapters you sent and will read them within the next two days. By all means use the three categories to describe your findings. You as the investigator do have the option of making decisions like that.

I respond to your chapters in a later e-mail.

Mary Corley

Permission for HECS results Categories

Email

Rabia: When you calculate the mean score of the Hospital Ethical Climate survey as a whole, it is the average of the 26 items in the total instrument (the mean is 3.31). Overall, this looks like the perception of ethical climate is fairly average. So you can use the three categories to describe your findings.

Thank you

Appendix III

Moral distress Scale descriptive statistics table

Perception of Hospital Ethical Climate Scale descriptive statistics table

Moral distress Scale descriptive statistics table

Variable	*Mean* (Intensity)	*Standard Deviation* (Intensity)	*Mean* (Frequency)	*Standard Deviation* (Frequency)	*Mean* (Total)	*Standard Deviation* (Total)
1. Follow the family's wishes for the patient's care	2.86	1.6	2.84	1.7	9.55	8.16
2. Follow the family's wishes to continue life support	3.52	1.7	3.30	1.7	12.9	10.70
3. Carry out a physician's order for unnecessary tests	3.25	1.8	3.40	1.9	13.2	10.89
4. Assist a physician who performs a test without informed	2.50	1.9	2.24	1.9	7.92	9.28
5. Initiate extensive life-saving actions when I think it only	3.22	1.9	3.15	1.9	13.1	11.50
6. Ignore situations of suspected patient abuse by caregivers.	2.60	1.9	2.43	1.7	8.13	9.48
7. Ignore situations in which patients have not been given	2.86	1.9	2.64	1.8	9.69	10.28
8. Carry out a work assignment in which I do not feel	2.74	1.9	2.93	1.7	9.70	10.24
9. Avoid taking action when I learn that a nurse colleague	2.59	2.0	2.27	1.7	7.99	9.20
10. Let medical students perform painful procedures on patients	2.11	1.8	2.15	1.7	6.53	8.48
11. Assist physicians who are practicing procedures on a patient	2.56	1.9	2.44	1.9	8.50	9.47
12. Carry out the physician's orders for unnecessary tests for term	3.08	1.7	2.96	1.8	11.4	10.70
13. Work with levels of nurse staffing that I consider "unsafe."	2.59	1.9	2.61	1.9	9.50	10.50
14. Carry out orders or institutional policies to discontinue	2.69	2.0	2.38	1.9	8.62	9.61
15. Continue to participate in care for a hopelessly injured	3.33	1.9	3.23	1.9	13.5	11.68
16. Observe without taking action when health care personnel	2.66	1.9	2.48	1.9	8.54	9.50
17. Follow the physician's order not to tell the patient the truth	2.92	1.7	2.78	1.8	10.3	9.59

Variable	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
	(Intensity)		(Frequency)		(Total)	
18. Assist a physician who in your opinion is providing	2.77	1.6	2.60	1.7	8.81	8.50
19. Prepare an elderly man for surgery to have a gastrostomy	2.83	2.0	2.52	2.0	9.50	11.34
20. Provide better care for those who can afford to pay than	2.17	1.9	1.76	1.6	5.66	7.54
21. Follow the family's request not to discuss death with a dying	2.86	1.8	2.65	1.7	9.29	9.34
22. Providing care that does not relieve the patient's suffering	2.99	1.6	2.55	1.8	9.52	9.04
23. Give medication intravenously during a CPR with no	2.59	2.0	2.23	1.9	8.73	10.27
24. Follow the physician's request not to discuss CPR or DNR	2.76	1.8	2.50	2.0	9.03	10.19
25. Follow the physician's request not to discuss CPR or DNR	2.69	1.8	2.42	1.8	8.69	9.71
26. Not being able to offer treatment because the costs will not	2.82	1.8	2.38	1.8	8.67	9.44
27. Follow the physician's request not to discuss death with a	2.53	1.8	2.31	1.7	7.62	8.75
28. Follow orders for pain medication even when the	3.00	1.7	2.85	1.6	10.3	9.39
29. Work with nurses who are not as competent as the patient	2.03	1.8	3.01	1.8	11.3	10.19
30. Work with nursing assistants who are not as competent as	2.72	1.8	2.40	1.7	8.47	9.10
31. Work with non-licensed personnel who are not as competent as	2.51	1.9	2.02	1.8	6.79	8.58
32. Work with physicians who are not as competent as the patient	2.85	1.8	2.53	1.8	9.21	10.54
33. Work with support personnel who are not as competent as the	2.79	1.8	2.35	1.7	8.40	9.48
34. Ask the patient's family about donating organs when the	2.35	1.9	1.87	1.7	6.11	7.62
35. Be required to care for patients I am not competent to care for.	2.49	1.8	2.15	1.8	7.05	8.40

Perception of Hospital Ethical Climate Scale descriptive statistics table

Variables	*Mean*	*Standard deviation*
1. My peers listen to my concerns about patient care.(peer)	3.40	0.97
2. My peers help me with difficult patient care issues/problems.(peer)	3.43	1.10
3. I work with competent colleagues. (peer)	3.29	1.00
4. Safe patient care is given on my unit. (peer)	3.75	1.10
5. Patients know what to expect from their care. (patient)	3.25	0.90
6. Nurses have access to the information necessary to solve a patient care issue/problem.(patient)	3.46	0.97
7. Nurses use the information necessary to solve a patient care issue/problem. (patient)	3.58	0.92
8. The patient's wishes are respected. (patient)	3.51	1.0
9. When I'm unable to decide what's right or wrong in a patient care situation, my manager helps me. (manager)	3.56	1.10
10. My manager supports me in my decisions about patient care. (manager)	3.50	1.10
11. My manager listens to me talk about patient care issues/problems (manager)	3.50	1.02
12. My manager is someone I can trust. (manager)	3.38	1.10
13. When my peers are unable to decide what's right or wrong in a particular patient care situation, I have observed that my manager helps them. (manager)	3.41	1.06
14. My manager is someone I respect. (manager)	3.59	1.17
15. Hospital policies help me with difficult patient care issues/problems .(hospital)	3.19	1.25
16. A clear sense of the hospital's mission is shared with nurses. (hospital)	2.94	1.08
17. The feelings and values of all parties involved in a patient care issue/problem are taken into account when choosing a course of actions. (hospital)	3.23	0.89

18. Conflict is openly dealt with, not avoided. (hospital)	2.90	1.04
19. There is a sense of questioning, learning, and seeking creative responses to patient care problems. (hospital)	3.41	1.08
20. I am able to practice nursing on my unit as I believe it should be practiced. (hospital)	3.53	1.16
21. Nurses and physicians trust one another. (physician)	3.12	1.17
22. Physicians ask nurses for their opinions about treatment decisions. (physician)	2.67	1.15
23. I participate in treatment decisions for my patients. (physician)	3.16	1.05
24. Nurses and physicians here respect each others' opinions, even when they disagree about what is best for patients. (physician)	3.07	1.17
25. Nurses and physicians respect one another. (physician)	3.25	1.10
26. Nurses are supported and respected in this hospital. (physician)	3.19	1.20

المعاناة الأخلاقية لدى ممرضي/ممرضات الرعاية الحثيثة في الأردن وإدراكهم للبيئة الأخلاقية للمستشفى

اعداد
ربيعة سليم علاري

المشرف
الدكتورة فتحية ابومغلي

ملخص

الهدف: وصف مستوى المعاناة الأخلاقية لدى ممرضي/ممرضات الرعاية الحثيثة في الأردن وإدراكهم للبيئة الأخلاقية للمستشفى، ودراسة العلاقة بين مستوى المعاناة الأخلاقية والإدراك للبيئة الأخلاقية وبعض المتغيرات الديموغرافية المختارة.

أهمية الدراسة: المعاناة الأخلاقية هي ظاهرة بدأت تحصل على المزيد من الإهتمام من قبل الذات اهتمام متزايد القلق في التمريض من قبل الجهات التعليمية، والمهنية، والبحثية. وقد أظهرت دراسات سابقة ان المعاناة الأخلاقية تترافق مع مدركات الممرضات و الممرضين للمناخ الأخلاقي في المستشفى ، وتنعكس على ممارسة مهنة التمريض ومخرجات الرعاية التمريضية.

منهجية البحث: استخدمت الدراسة المنهج الوصفي للإجابة على الأسئلة الموضوعة. وتم تطبيق مقياس شدة المعاناة الأخلاقية، ومقياس المناخ الأخلاقي في المستشفى، واستمارة البيانات الديموغرافية لجمع المعلومات من عينة عشوائية تتألف من 150 ممرضا وممرضة من العاملين في وحدات الرعاية التمريضية الحثيثة من 12 مستشفى في الأردن. وتم تحليل البيانات باستخدام النظام الإحصائي للعلوم الاجتماعية لإجراء الإحصاء الوصفي والاستدلالي.

النتائج: سجل المشاركون في البحث مستويات متوسطة من المعاناة الأخلاقية. و أظهرت النتائج أن شدة المعاناة الأخلاقية لا ترتبط مع مدركات المشاركين للمناخ الأخلاقي في المستشفى، ولم تسجل أي علاقة ذات دلالة إحصائية بين أي من عوامل مقياس المناخ الأخلاقي في المستشفى (الزملاء، والمرضى، والمديرين ، والمستشفيات) مع المعاناة الأخلاقية باستثناء العامل المتعلق بالعلاقة بين الأطباء والممرضين.

الخلاصة: بينت الدراسة أن هناك حاجة ملحة للعمل على توضيح مفهوم المعاناة الأخلاقية لتوليد فهم أكثر قوة للموضوع في مهنة التمريض، بالأضافة الى ضرورة العمل على فهم العلاقة بين المعاناة الأخلاقية، والمناخ الأخلاقي، وقرارات الممرضين لترك مهنة التمريض، وتأثير ذلك على رعايتهم للمرضى ويمكن لهذا أن يسهم في تطوير وصقل أدوات لقياس المعاناة الأخلاقية، و المناخ الأخلاقي في المستشفيات الأردنية.

التطبيقات العملية للبحث: بالرغم من عدم وجود علاقات ذات دلالة احصائية، يمكن أن تساعد نتائج هذه الدراسة مديري المستشفيات ومديري التمريض في تحديد العوامل التي تسهم في المعاناة الأخلاقية من المنظور الخاص بالممرضين / الممرضات ، كما تسهم في المساعدة في تخطيط وتنفيذ استراتيجيات للحد من هذه المعاناة بين الممرضين العاملين في وحدات الرعاية الحثيثة مما يؤدي إلى تحسين نوعية الرعاية التمريضية.